


















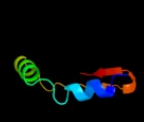









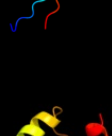
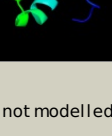


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P77598
Date	Thu Jan 5 12:30:54 GMT 2012
Unique Job ID	144310f1db1fb91e

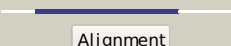
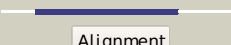
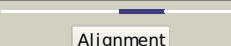
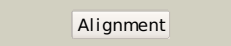


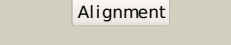
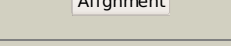
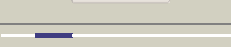
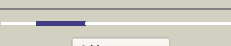
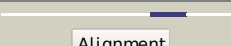


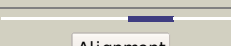





Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2hh8a1	 Alignment		100.0	80	Fold: YdfO-like Superfamily: YdfO-like Family: YdfO-like
2	d3elga1	 Alignment		81.9	11	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
3	c2qlxA	 Alignment		41.0	18	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
4	c2qlwA	 Alignment		41.0	18	PDB header: isomerase Chain: A: PDB Molecule: rhau; PDBTitle: crystal structure of rhamnose mutarotase rhau of rhizobium2 leguminosarum
5	d3duea1	 Alignment		39.4	4	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
6	c1f8aB	 Alignment		26.7	10	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
7	c2ph7B	 Alignment		26.6	38	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein af_2093; PDBTitle: crystal structure of af2093 from archaeoglobus fulgidus
8	c1irjG	 Alignment		25.8	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
9	c2w3nA	 Alignment		25.2	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 cryptococcus3 neoformans
10	d1x8da1	 Alignment		24.3	14	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: YiiL-like
11	d1avsa	 Alignment		23.4	17	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like

12	c2k7bA_	Alignment		23.2	14	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein 1; PDBTitle: nmr structure of mg2+-bound cabp1 n-domain
13	c3l23A_	Alignment		21.6	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
14	c3ec8A_	Alignment		18.7	11	PDB header: cell adhesion Chain: A: PDB Molecule: putative uncharacterized protein flj10324; PDBTitle: the crystal structure of the ra domain of flj10324 (radil)
15	c3obeB_	Alignment		17.9	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
16	d1xk4a1	Alignment		17.4	13	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
17	d1ekja_	Alignment		16.6	10	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
18	d1m39a_	Alignment		16.4	20	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
19	d1g5ca_	Alignment		15.8	13	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
20	c2i18A_	Alignment		15.7	9	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
21	c3ot2B_	Alignment	not modelled	14.2	15	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
22	c3ot2A_	Alignment	not modelled	14.2	15	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
23	d1k8ua_	Alignment	not modelled	14.0	31	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
24	d1g33a_	Alignment	not modelled	13.2	19	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
25	d1j55a_	Alignment	not modelled	12.9	12	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
26	c3ucoB_	Alignment	not modelled	12.6	15	PDB header: lyase/lyase inhibitor Chain: B: PDB Molecule: carbonic anhydrase; PDBTitle: coccomyxa beta-carbonic anhydrase in complex with iodide
27	c2kaxA_	Alignment	not modelled	12.3	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
28	d1e8aa_	Alignment	not modelled	12.2	19	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins

29	c2rqsA	Alignment	not modelled	12.2	15	PDB header: isomerase Chain: A: PDB Molecule: parvulin-like peptidyl-prolyl isomerase; PDBTitle: 3d structure of pin from the psychrophilic archeon cenarchaeum2 symbiosum (cspin)
30	d1pvaa	Alignment	not modelled	11.7	12	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
31	d4icba	Alignment	not modelled	11.6	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calbindin D9K
32	d1wxaa1	Alignment	not modelled	11.5	6	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
33	dli6pa	Alignment	not modelled	11.2	14	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
34	c2rgiA	Alignment	not modelled	11.1	27	PDB header: metal binding protein Chain: A: PDB Molecule: protein s100-a2; PDBTitle: crystal structure of ca2+-free s100a2 at 1.6 a resolution
35	c2hklB	Alignment	not modelled	11.1	9	PDB header: transferase Chain: B: PDB Molecule: l,d-transpeptidase; PDBTitle: crystal structure of enterococcus faecium l,d-2 transpeptidase c442s mutant
36	c2z4hB	Alignment	not modelled	11.1	12	PDB header: signaling protein activator Chain: B: PDB Molecule: copper homeostasis protein cutf; PDBTitle: crystal structure of the cpx pathway activator nlpe from2 escherichia coli
37	c2ggmA	Alignment	not modelled	11.0	14	PDB header: cell cycle Chain: A: PDB Molecule: centrin-2; PDBTitle: human centrin 2 xeroderma pigmentosum group c protein2 complex
38	d1xk4c1	Alignment	not modelled	10.8	15	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
39	c2a4jA	Alignment	not modelled	10.6	13	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
40	c2k2aA	Alignment	not modelled	10.4	23	PDB header: contractile protein Chain: A: PDB Molecule: troponin c; PDBTitle: solution structure of the apo c terminal domain of lethocerus troponin2 c isoform f1
41	c2b1uA	Alignment	not modelled	10.3	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
42	c2pmyB	Alignment	not modelled	10.2	24	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: ras and ef-hand domain-containing protein; PDBTitle: ef-hand domain of human rasef
43	c2a5vB	Alignment	not modelled	10.1	11	PDB header: lyase Chain: B: PDB Molecule: carbonic anhydrase (carbonate dehydratase) (carbonic PDBTitle: crystal structure of m. tuberculosis beta carbonic anhydrase, rv3588c,2 tetrameric form
44	d1eq3a	Alignment	not modelled	9.9	5	Fold: FKBP-like Superfamily: FKBP-like Family: FKBP immunophilin/proline isomerase
45	c2a8cE	Alignment	not modelled	9.9	11	PDB header: lyase Chain: E: PDB Molecule: carbonic anhydrase 2; PDBTitle: haemophilus influenzae beta-carbonic anhydrase
46	c1ponB	Alignment	not modelled	9.7	20	PDB header: calcium-binding protein Chain: B: PDB Molecule: troponin c; PDBTitle: site iii-site iv troponin c heterodimer, nmr
47	d1c7va	Alignment	not modelled	9.6	9	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
48	c3p6lA	Alignment	not modelled	9.5	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
49	c2kz2A	Alignment	not modelled	9.4	0	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin; PDBTitle: calmodulin, c-terminal domain, f92e mutant
50	d1oqpa	Alignment	not modelled	9.4	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
51	d1zmba1	Alignment	not modelled	9.4	12	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Putative acetylxytan esterase-like
52	d1a4pa	Alignment	not modelled	9.3	16	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
53	d1dj0a	Alignment	not modelled	9.3	12	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase I TruA
54	d1urra	Alignment	not modelled	9.3	21	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like

55	c2l0vB_	Alignment	not modelled	9.2	15	PDB header: metal binding protein Chain: B: PDB Molecule: protein s100-a16; PDBTitle: solution structure of calcium(ii) bound s100a16
56	dlapsa_	Alignment	not modelled	8.9	7	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
57	d2p5zx2	Alignment	not modelled	8.8	12	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
58	c1q88B_	Alignment	not modelled	8.8	11	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)
59	dlksoa_	Alignment	not modelled	8.6	27	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
60	c3h4sE_	Alignment	not modelled	8.6	3	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
61	d2gaxa1	Alignment	not modelled	8.6	19	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
62	dllyuta1	Alignment	not modelled	8.2	16	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
63	d2pv2a1	Alignment	not modelled	8.2	17	Fold: FKBP-like Superfamily: FKBP-like Family: FKBP immunophilin/proline isomerase
64	dlj6ya_	Alignment	not modelled	8.1	9	Fold: FKBP-like Superfamily: FKBP-like Family: FKBP immunophilin/proline isomerase
65	c3ddcB_	Alignment	not modelled	8.1	13	PDB header: hydrolase/apoptosis Chain: B: PDB Molecule: ras association domain-containing family protein 5; PDBTitle: crystal structure of nore1a in complex with ras
66	d3d37a1	Alignment	not modelled	8.1	17	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
67	d2pq3a1	Alignment	not modelled	8.1	13	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
68	dlm45a_	Alignment	not modelled	8.0	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
69	c2p5zX_	Alignment	not modelled	8.0	12	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
70	dlcbla_	Alignment	not modelled	8.0	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calbindin D9K
71	dlqlka_	Alignment	not modelled	7.9	15	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
72	c1bomB_	Alignment	not modelled	7.8	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 silkmoth bombyx3 mori: comparison with insulin and relaxin
73	dlwrka1	Alignment	not modelled	7.7	10	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
74	d3cr5x1	Alignment	not modelled	7.7	19	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
75	c3ox6C_	Alignment	not modelled	7.6	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)
76	dlj3ea_	Alignment	not modelled	7.6	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
77	dlpsra_	Alignment	not modelled	7.5	17	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
78	c3fs7D_	Alignment	not modelled	7.4	15	PDB header: metal binding protein Chain: D: PDB Molecule: parvalbumin, thymic; PDBTitle: crystal structure of gallus gallus beta-parvalbumin (avian2 thymic hormone)
79	c3cnyA_	Alignment	not modelled	7.4	17	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 wcfs1 at 1.85 a3 resolution
80	dlqx2a_	Alignment	not modelled	7.4	13	Fold: EF Hand-like Superfamily: EF-hand Family: Calbindin D9K

81	c2amiA		Alignment	not modelled	7.2	16	PDB header: cell cycle Chain: A: PDB Molecule: caltractin; PDBTitle: solution structure of the calcium-loaded n-terminal sensor2 domain of centrin
82	c2ktgA		Alignment	not modelled	7.2	17	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
83	d2obha1		Alignment	not modelled	7.2	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
84	d1zaca		Alignment	not modelled	7.1	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
85	c3lmzA		Alignment	not modelled	7.0	9	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
86	d1q88a		Alignment	not modelled	6.9	13	Fold: 39 kda initiator binding protein, IBP39, C-terminal domains Superfamily: 39 kda initiator binding protein, IBP39, C-terminal domains Family: 39 kda initiator binding protein, IBP39, C-terminal domains
87	d1ftpa		Alignment	not modelled	6.9	7	Fold: Lipocalins Superfamily: Lipocalins Family: Fatty acid binding protein-like
88	c2vtgA		Alignment	not modelled	6.9	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
89	d2acya		Alignment	not modelled	6.8	10	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
90	d1m5ya3		Alignment	not modelled	6.8	9	Fold: FKBP-like Superfamily: FKBP-like Family: FKBP immunophilin/proline isomerase
91	c3br8A		Alignment	not modelled	6.8	10	PDB header: hydrolase Chain: A: PDB Molecule: probable acylphosphatase; PDBTitle: crystal structure of acylphosphatase from bacillus subtilis
92	c3ngfA		Alignment	not modelled	6.7	18	PDB header: isomerase Chain: A: PDB Molecule: ap endonuclease, family 2; PDBTitle: crystal structure of ap endonuclease, family 2 from brucella2 melitensis
93	c2kdhA		Alignment	not modelled	6.6	11	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
94	d1w2ia		Alignment	not modelled	6.6	21	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
95	d5pala		Alignment	not modelled	6.5	15	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
96	c1yw5A		Alignment	not modelled	6.5	8	PDB header: isomerase Chain: A: PDB Molecule: peptidyl prolyl cis/trans isomerase; PDBTitle: peptidyl-prolyl isomerase ess1 from candida albicans
97	c2dk6A		Alignment	not modelled	6.5	24	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)
98	c3cu2A		Alignment	not modelled	6.4	12	PDB header: isomerase Chain: A: PDB Molecule: ribulose-5-phosphate 3-epimerase; PDBTitle: crystal structure of ribulose-5-phosphate 3-epimerase (yp_718263.1)2 from haemophilus somnus 129pt at 1.91 a resolution
99	c1ozsA		Alignment	not modelled	6.4	9	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