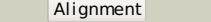
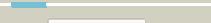
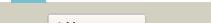
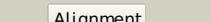
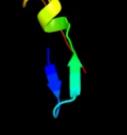
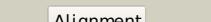
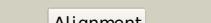
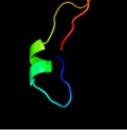


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P23874
Date	Wed Jan 25 15:20:44 GMT 2012
Unique Job ID	be1356fc9c8052a5

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3dntB_			100.0	98	PDB header: transferase Chain: B; PDB Molecule: protein hipa; PDBTitle: structures of mdt proteins
2	c3akjB_			100.0	14	PDB header: transferase Chain: B; PDB Molecule: ctka; PDBTitle: crystal structure of a helicobacter pylori proinflammatory kinase ctna
3	d1cjaa_			95.1	14	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Actin-fragmin kinase, catalytic domain
4	c3attA_			35.5	11	PDB header: transferase Chain: A; PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of rv3168 with atp
5	d2je8a4			33.7	14	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
6	d1bhga2			31.4	19	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
7	d1jz8a3			30.8	18	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
8	d1yq2a3			29.2	18	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
9	c3fn9B_			26.1	23	PDB header: hydrolase Chain: B; PDB Molecule: putative beta-galactosidase; PDBTitle: crystal structure of putative beta-galactosidase from bacteroides2 fragilis
10	d2vzsa4			25.0	12	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
11	c3bgab_			23.1	14	PDB header: hydrolase Chain: B; PDB Molecule: beta-galactosidase; PDBTitle: crystal structure of beta-galactosidase from bacteroides2 thetaiotaomicron vpi-5482

12	d1eucb2			23.1	23	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Succinyl-CoA synthetase, beta-chain, N-terminal domain
13	c3gm8A			23.0	31	PDB header: hydrolase Chain: A: PDB Molecule: glycoside hydrolase family 2, candidate beta-glycosidase; PDBTitle: crystal structure of a beta-glycosidase from bacteroides vulgatus
14	c3cmgA			22.5	15	PDB header: hydrolase Chain: A: PDB Molecule: putative beta-galactosidase; PDBTitle: crystal structure of putative beta-galactosidase from bacteroides2 fragilis
15	d1iowa2			22.0	24	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: ATP-binding domain of peptide synthetases
16	d1uc8a2			20.1	15	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Lysine biosynthesis enzyme LysX ATP-binding domain
17	d2nu7b2			19.2	27	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Succinyl-CoA synthetase, beta-chain, N-terminal domain
18	c3obaA			19.0	18	PDB header: hydrolase Chain: A: PDB Molecule: beta-galactosidase; PDBTitle: structure of the beta-galactosidase from kluyveromyces lactis
19	c3lpgA			18.8	36	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: beta-glucuronidase; PDBTitle: structure of e. coli beta-glucuronidase bound with a novel, potent2 inhibitor 3-(2-fluorophenyl)-1-(2-hydroxyethyl)-1-((6-methyl-2-oxo-1,3 2-dihydroquinolin-3-yl)methyl)urea
20	c2vzb2			18.8	12	PDB header: hydrolase Chain: B: PDB Molecule: exo-beta-d-glucosaminidase; PDBTitle: substrate complex of amycolatopsis orientalis exo-2 chitosanase csxa e541a with chitosan
21	c3ln7A		not modelled	18.2	19	PDB header: ligase Chain: A: PDB Molecule: glutathione biosynthesis bifunctional protein gshab; PDBTitle: crystal structure of a bifunctional glutathione synthetase from2 pasteurella multocida
22	c1jz6C		not modelled	17.6	18	PDB header: hydrolase Chain: C: PDB Molecule: beta-galactosidase; PDBTitle: e. coli (lacZ) beta-galactosidase in complex with galacto-2 tetrazole
23	d1e4ea2		not modelled	16.9	25	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: ATP-binding domain of peptide synthetases
24	c3mv14		not modelled	16.1	18	PDB header: hydrolase Chain: 4: PDB Molecule: beta-galactosidase; PDBTitle: e.coli (lacZ) beta-galactosidase (r599a) in complex with guanidinium
25	c3oq9C		not modelled	15.2	17	PDB header: apoptosis Chain: C: PDB Molecule: tumor necrosis factor receptor superfamily member 6; PDBTitle: structure of the fas/fadd death domain assembly
26	c1yq2C		not modelled	14.6	18	PDB header: hydrolase Chain: C: PDB Molecule: beta-galactosidase; PDBTitle: beta-galactosidase from arthrobacter sp. c2-2 (isoenzyme c2-2 2-1)
27	d1ddfa		not modelled	14.5	12	Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
28	c3cqB		not modelled	14.1	13	PDB header: hydrolase Chain: B: PDB Molecule: probable protease htpx homolog; PDBTitle: crystal structure of heat shock protein htpx domain from vibrio2 parahaemolyticus rimpd 2210633

29	c3ln6A_	Alignment	not modelled	13.6	10	PDB header: ligase Chain: A; PDB Molecule: glutathione biosynthesis bifunctional protein gshab; PDBTitle: crystal structure of a bifunctional glutathione synthetase from2 streptococcus agalactiae
30	d1kjqa3	Alignment	not modelled	13.4	27	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: BC ATP-binding domain-like
31	c1bhgB_	Alignment	not modelled	12.3	23	PDB header: glycosidase Chain: B; PDB Molecule: beta-glucuronidase; PDBTitle: human beta-glucuronidase at 2.6 a resolution
32	c3tqtb_	Alignment	not modelled	11.8	15	PDB header: ligase Chain: B; PDB Molecule: d-alanine--d-alanine ligase; PDBTitle: structure of the d-alanine-d-alanine ligase from coxiella burnetii
33	c2ddcA_	Alignment	not modelled	11.8	14	PDB header: luminous protein Chain: A; PDB Molecule: photoconvertible fluorescent protein; PDBTitle: unique behavior of a histidine responsible for an engineered green-to-red photoconversion process
34	d1ehia2	Alignment	not modelled	11.6	10	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: ATP-binding domain of peptide synthetases
35	d3etja3	Alignment	not modelled	11.6	14	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: BC ATP-binding domain-like
36	c1ehiB_	Alignment	not modelled	11.4	12	PDB header: ligase Chain: B; PDB Molecule: d-alanine:d-lactate ligase; PDBTitle: d-alanine:d-lactate ligase (Imdl2) of vancomycin-resistant2 leuconostoc mesenteroides
37	c1wr2A_	Alignment	not modelled	10.9	33	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein ph1789; PDBTitle: crystal structure of ph1788 from pyrococcus horikoshii ot3
38	c2otbB_	Alignment	not modelled	10.9	16	PDB header: fluorescent protein Chain: B; PDB Molecule: gfp-like fluorescent chromoprotein cfp484; PDBTitle: crystal structure of a monomeric cyan fluorescent protein2 in the fluorescent state
39	d1tg7a2	Alignment	not modelled	10.5	27	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Beta-galactosidase LacA, domains 4 and 5
40	d1moua_	Alignment	not modelled	10.4	14	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
41	c3da4B_	Alignment	not modelled	10.2	39	PDB header: antibiotic Chain: B; PDB Molecule: colicin-m; PDBTitle: crystal structure of colicin m, a novel phosphatase2 specifically imported by escherichia coli
42	d1ggxa_	Alignment	not modelled	10.2	12	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
43	d1icha_	Alignment	not modelled	10.1	8	Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
44	c1clchA_	Alignment	not modelled	10.1	8	PDB header: apoptosis Chain: A; PDB Molecule: tumor necrosis factor receptor-1; PDBTitle: solution structure of the tumor necrosis factor receptor-12 death domain
45	c2rcyB_	Alignment	not modelled	10.1	13	PDB header: oxidoreductase Chain: B; PDB Molecule: pyrrole carboxylate reductase; PDBTitle: crystal structure of plasmodium falciparum pyrrole carboxylate2 reductase (mal13p1.284) with nadp bound
46	c3cgxE_	Alignment	not modelled	9.7	13	PDB header: fluorescent protein Chain: E; PDB Molecule: gfp-like fluorescent chromoprotein dsfp483; PDBTitle: crystal structure and raman studies of dsfp483, a cyan fluorescent2 protein from discosoma striata
47	d2cg4a1	Alignment	not modelled	9.7	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
48	c3i12A_	Alignment	not modelled	9.7	15	PDB header: ligase Chain: A; PDB Molecule: d-alanine-d-alanine ligase a; PDBTitle: the crystal structure of the d-alanyl-alanine synthetase a from2 salmonella enterica subsp. enterica serovar typhimurium str. It2
49	c3riwaA_	Alignment	not modelled	9.0	18	PDB header: oxidoreductase Chain: A; PDB Molecule: ascorbate peroxidase; PDBTitle: the crystal structure of leishmania major peroxidase mutant c197t
50	c2z04A_	Alignment	not modelled	8.8	21	PDB header: lyase Chain: A; PDB Molecule: phosphoribosylaminoimidazole carboxylase atpase PDBTitle: crystal structure of phosphoribosylaminoimidazole2 carboxylase atpase subunit from aquifex aeolicus
51	c2z6za_	Alignment	not modelled	8.8	15	PDB header: fluorescent protein Chain: A; PDB Molecule: fluorescent protein dronpa; PDBTitle: crystal structure of a photoswitchable gfp-like protein2 dronpa in the bright-state
52	c3ls1A_	Alignment	not modelled	8.5	15	PDB header: photosynthesis Chain: A; PDB Molecule: ll1638 protein; PDBTitle: crystal structure of cyanobacterial psbq from synecchocystis sp. pcc 6803 complexed with zn2+
53	c2je8B_	Alignment	not modelled	8.5	9	PDB header: hydrolase Chain: B; PDB Molecule: beta-mannosidase; PDBTitle: structure of a beta-mannosidase from bacteroides2 thetaiotaomicron
						PDB header: ligase

54	c3r23B_	Alignment	not modelled	8.3	11	Chain: B; PDB Molecule: d-alanine--d-alanine ligase; PDBTitle: crystal structure of d-alanine--d-alanine ligase from bacillus2 anthracis
55	d1uisa_	Alignment	not modelled	8.2	14	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
56	c2nu9E_	Alignment	not modelled	8.1	29	PDB header: ligase Chain: E; PDB Molecule: succinyl-coa synthetase beta chain; PDBTitle: c123at mutant of e. coli succinyl-coa synthetase2 orthorhombic crystal form
57	c3se7A_	Alignment	not modelled	8.0	15	PDB header: ligase Chain: A; PDB Molecule: vana; PDBTitle: ancient vana
58	c3lwba_	Alignment	not modelled	7.9	16	PDB header: ligase Chain: A; PDB Molecule: d-alanine--d-alanine ligase; PDBTitle: crystal structure of apo d-alanine:d-alanine ligase (ddl) from2 mycobacterium tuberculosis
59	d1zyla1	Alignment	not modelled	7.8	9	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: APH phosphotransferases
60	d1h5wa_	Alignment	not modelled	7.7	13	Fold: Upper collar protein gp10 (connector protein) Superfamily: Upper collar protein gp10 (connector protein) Family: Upper collar protein gp10 (connector protein)
61	d3buxb2	Alignment	not modelled	7.7	30	Fold: N-cbl like Superfamily: N-terminal domain of cbl (N-cbl) Family: N-terminal domain of cbl (N-cbl)
62	c1ijgE_	Alignment	not modelled	7.6	13	PDB header: viral protein Chain: E; PDB Molecule: upper collar protein; PDBTitle: structure of the bacteriophage phi29 head-tail connector2 protein
63	d2cyya1	Alignment	not modelled	7.5	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
64	d1z67a1	Alignment	not modelled	7.5	9	Fold: YidB-like Superfamily: YidB-like Family: YidB-like
65	c2icrD_	Alignment	not modelled	7.4	17	PDB header: fluorescent protein Chain: D; PDB Molecule: red fluorescent protein zoanrfp; PDBTitle: red fluorescent protein zrfp574 from zoanthus sp.
66	d1l1ga1	Alignment	not modelled	7.3	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
67	c2pvpB_	Alignment	not modelled	7.3	26	PDB header: ligase Chain: B; PDB Molecule: d-alanine-d-alanine ligase; PDBTitle: crystal structure of d-alanine-d-alanine ligase from helicobacter pylori
68	c2i80B_	Alignment	not modelled	7.2	12	PDB header: ligase Chain: B; PDB Molecule: d-alanine-d-alanine ligase; PDBTitle: all steric inhibition of staphylococcus aureus d-alanine:d-alanine2 ligase revealed by crystallographic studies
69	c2c9iG_	Alignment	not modelled	7.0	18	PDB header: luminescent protein Chain: G; PDB Molecule: green fluorescent protein asfp499; PDBTitle: structure of the fluorescent protein asfp499 from anomeria2 sulcata
70	c1e4eb_	Alignment	not modelled	6.9	20	PDB header: ligase Chain: B; PDB Molecule: vancomycin/teicoplanin a-type resistance protein vana; PDBTitle: d-alanyl-d-lactate ligase
71	c3nezB_	Alignment	not modelled	6.9	12	PDB header: fluorescent protein Chain: B; PDB Molecule: mrojaa; PDBTitle: mrojaa
72	d1re0b_	Alignment	not modelled	6.6	19	Fold: alpha-alpha superhelix Superfamily: Sec7 domain Family: Sec7 domain
73	d1eoae_	Alignment	not modelled	6.3	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: N-terminal Zn binding domain of HIV integrase Family: N-terminal Zn binding domain of HIV integrase
74	d2rh7a1	Alignment	not modelled	6.3	8	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
75	c1rr7A_	Alignment	not modelled	6.2	6	PDB header: transcription Chain: A; PDB Molecule: middle operon regulator; PDBTitle: crystal structure of the middle operon regulator protein of2 bacteriophage mu
76	d1rr7a_	Alignment	not modelled	6.2	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Middle operon regulator, Mor
77	c2w48D_	Alignment	not modelled	6.2	18	PDB header: transcription Chain: D; PDB Molecule: sorbitol operon regulator; PDBTitle: crystal structure of the full-length sorbitol operon2 regulator sorc from klebsiella pneumoniae
78	d1bc9a_	Alignment	not modelled	6.2	25	Fold: alpha-alpha superhelix Superfamily: Sec7 domain Family: Sec7 domain
79	c1eucB_	Alignment	not modelled	6.1	24	PDB header: ligase Chain: B; PDB Molecule: succinyl-coa synthetase, beta chain; PDBTitle: crystal structure of dephosphorylated pig heart, gtp-2 specific succinyl-coa synthetase
80	d2ahra1	Alignment	not modelled	6.1	15	Fold: 6-phosphoglucuronate dehydrogenase C-terminal domain-like Superfamily: 6-phosphoglucuronate dehydrogenase C-terminal domain-like Family: Pro C-terminal domain-like

81	c2zo7A		Alignment	not modelled	6.1	18	PDB header: luminescent protein Chain: A: PDB Molecule: cyan/green-emitting gfp-like protein, kusabira-cyan mutant PDBTitle: crystal structure of a kusabira-cyan mutant (kcy-r1), a cyan/green-2 emitting gfp-like protein
82	c2I4aA		Alignment	not modelled	6.1	13	PDB header: dna binding protein Chain: A: PDB Molecule: leucine responsive regulatory protein; PDBTitle: nmr structure of the dna-binding domain of e.coli lrp
83	c3op0B		Alignment	not modelled	6.0	14	PDB header: signaling protein/signaling protein regu Chain: B: PDB Molecule: signal transduction protein cbl-c; PDBTitle: crystal structure of cbl-c (cbl-3) tkb domain in complex with egfr2 py1069 peptide
84	c2a8vA		Alignment	not modelled	6.0	24	PDB header: protein/rna Chain: A: PDB Molecule: rna binding domain of rho transcription PDBTitle: rho transcription termination factor/rna complex
85	d2j9ga3		Alignment	not modelled	5.9	12	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: BC ATP-binding domain-like
86	d1uptd		Alignment	not modelled	5.9	14	Fold: GRIP domain Superfamily: GRIP domain Family: GRIP domain
87	c2zdqA		Alignment	not modelled	5.8	11	PDB header: ligase Chain: A: PDB Molecule: d-alanine-d-alanine ligase; PDBTitle: crystal structure of d-alanine:d-alanine ligase with atp2 and d-alanine:d-alanine from thermus thermophilus hb8
88	c2dlnA		Alignment	not modelled	5.8	19	PDB header: ligase(peptidoglycan synthesis) Chain: A: PDB Molecule: d-alanine-d-alanine ligase; PDBTitle: vancomycin resistance: structure of d-alanine:d-alanine2 ligase at 2.3 angstroms resolution
89	d1xsza1		Alignment	not modelled	5.8	31	Fold: alpha-alpha superhelix Superfamily: Sec7 domain Family: Sec7 domain
90	d1oira		Alignment	not modelled	5.7	18	Fold: AraD/HMP-PK domain-like Superfamily: AraD/HMP-PK domain-like Family: AraD-like aldolase/epimerase
91	c2ib5H		Alignment	not modelled	5.7	10	PDB header: luminescent protein Chain: H: PDB Molecule: chromo protein; PDBTitle: structural characterization of a blue chromoprotein and its yellow2 mutant from the sea anemone cnidopus japonicus
92	c3jr1A		Alignment	not modelled	5.6	12	PDB header: transferase Chain: A: PDB Molecule: putative fructosamine-3-kinase; PDBTitle: crystal structure of putative fructosamine-3-kinase2 (yp_719053.1) from haemophilus somnus 129pt at 2.32 a3 resolution
93	d1p1ma1		Alignment	not modelled	5.6	10	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: SAH/MTA deaminase-like
94	c2jpmA		Alignment	not modelled	5.6	33	PDB header: antimicrobial protein Chain: A: PDB Molecule: bacteriocin lactococcin-g subunit beta; PDBTitle: lactococcin g-b in tfe
95	c2vbzA		Alignment	not modelled	5.6	4	PDB header: dna-binding protein Chain: A: PDB Molecule: transcriptional regulatory protein; PDBTitle: feast or famine regulatory protein (rv3291c)from m.2 tuberculosis complexed with l-tryptophan
96	d1dwka1		Alignment	not modelled	5.6	19	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Cyanase N-terminal domain
97	d1kulA		Alignment	not modelled	5.6	19	Fold: alpha-alpha superhelix Superfamily: Sec7 domain Family: Sec7 domain
98	c2iifA		Alignment	not modelled	5.5	17	PDB header: recombination/dna Chain: A: PDB Molecule: integration host factor; PDBTitle: single chain integration host factor mutant protein (scihf2-2 k45ae) in complex with dna
99	c3ls8A		Alignment	not modelled	5.5	23	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol 3-kinase catalytic subunit PDBTitle: crystal structure of human pik3c3 in complex with 3-[4-(4-2 morpholinyl)thieno[3,2-d]pyrimidin-2-yl]-phenol