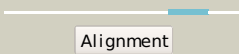

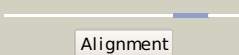

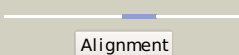
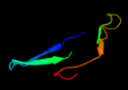




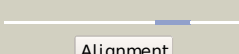

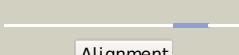

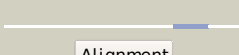

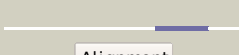




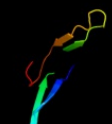


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P75829
Date	Thu Jan 5 12:14:45 GMT 2012
Unique Job ID	19f78feeb3f1fd1e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2cx6a1	 Alignment		32.0	19	Fold: Barstar-like Superfamily: Barstar-related Family: Barstar-related
2	d3saka_	 Alignment		26.9	24	Fold: p53 tetramerization domain Superfamily: p53 tetramerization domain Family: p53 tetramerization domain
3	c3bvhe_	 Alignment		25.2	15	PDB header: blood clotting Chain: E: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of recombinant gamma364a fibrinogen fragment d with2 the peptide ligand gly-pro-arg-pro-amide
4	d2o3aa1	 Alignment		24.3	17	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF0751-like
5	c3peiA_	 Alignment		22.8	20	PDB header: hydrolase Chain: A: PDB Molecule: cytosol aminopeptidase; PDBTitle: crystal structure of cytosol aminopeptidase from francisella2 tularensis
6	c3nw0B_	 Alignment		22.0	14	PDB header: metal binding protein Chain: B: PDB Molecule: melanoma-associated antigen g1; PDBTitle: crystal structure of maged1 and nse1 complex
7	c3zy1A_	 Alignment		20.4	43	PDB header: transcription Chain: A: PDB Molecule: tumor protein 63; PDBTitle: crystal structure of the human p63 tetramerization domain
8	c4a9zD_	 Alignment		20.0	43	PDB header: transcription Chain: D: PDB Molecule: tumor protein 63; PDBTitle: crystal structure of human p63 tetramerization domain
9	d1gyta2	 Alignment		19.9	20	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Leucine aminopeptidase, C-terminal domain
10	d1zc6a2	 Alignment		19.8	17	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
11	c2hpcH_	 Alignment		19.5	15	PDB header: blood clotting Chain: H: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of fragment d from human fibrinogen complexed with2 gly-pro-arg-pro-amide.

12	c3qu3A_		Alignment		18.8	33	PDB header: dna binding protein Chain: A: PDB Molecule: interferon regulatory factor 7; PDBTitle: crystal structure of irf-7 dbd apo form
13	c1lwuH_		Alignment		18.0	10	PDB header: blood clotting Chain: H: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of fragment d from lamprey fibrinogen complexed with2 the peptide gly-his-arg-pro-amide
14	c3d35A_		Alignment		17.1	16	PDB header: transferase Chain: A: PDB Molecule: regulator of ty1 transposition protein 109; PDBTitle: crystal structure of rtt109-ac-coa complex
15	c3h8gC_		Alignment		17.0	16	PDB header: hydrolase Chain: C: PDB Molecule: cytosol aminopeptidase; PDBTitle: bestatin complex structure of leucine aminopeptidase from pseudomonas2 putida
16	d2fh1a2		Alignment		16.3	56	Fold: Gelsolin-like Superfamily: Actin depolymerizing proteins Family: Gelsolin-like
17	c2c4rL_		Alignment		15.9	50	PDB header: hydrolase Chain: L: PDB Molecule: ribonuclease e; PDBTitle: catalytic domain of e. coli rnase e
18	c3rayA_		Alignment		15.5	13	PDB header: transcription Chain: A: PDB Molecule: pr domain-containing protein 11; PDBTitle: crystal structure of methyltransferase domain of human pr domain-2 containing protein 11
19	c3jruB_		Alignment		15.0	19	PDB header: hydrolase Chain: B: PDB Molecule: probable cytosol aminopeptidase; PDBTitle: crystal structure of leucyl aminopeptidase (pepa) from xoo0834,2 xanthomonas oryzae pv. oryzae kacc10331
20	c3kr5E_		Alignment		14.5	20	PDB header: hydrolase Chain: E: PDB Molecule: m17 leucyl aminopeptidase; PDBTitle: structure of a protease 4
21	d1v8ca2		Alignment	not modelled	14.1	35	Fold: TBP-like Superfamily: MoaD-related protein, C-terminal domain Family: MoaD-related protein, C-terminal domain
22	c2gutA_		Alignment	not modelled	13.4	29	PDB header: transcription Chain: A: PDB Molecule: arc/mediator, positive cofactor 2 glutamine/q- PDBTitle: solution structure of the trans-activation domain of the2 human co-activator arc105
23	d1lama1		Alignment	not modelled	13.3	16	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Leucine aminopeptidase, C-terminal domain
24	c2vcpE_		Alignment	not modelled	13.1	27	PDB header: structural protein Chain: E: PDB Molecule: neural wiskott-aldrich syndrome protein; PDBTitle: crystal structure of n-wasp vc domain in complex with2 skeletal actin
25	d1d0na5		Alignment	not modelled	13.0	45	Fold: Gelsolin-like Superfamily: Actin depolymerizing proteins Family: Gelsolin-like
26	d1e7ua2		Alignment	not modelled	12.9	8	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
27	c3ghgK_		Alignment	not modelled	12.6	15	PDB header: blood clotting Chain: K: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of human fibrinogen
28	c1gytG_		Alignment	not modelled	12.4	20	PDB header: hydrolase Chain: G: PDB Molecule: cytosol aminopeptidase; PDBTitle: e. coli aminopeptidase a (pepa)
							Fold: Gelsolin-like

29	d1npha2	Alignment	not modelled	12.2	56	Superfamily: Actin depolymerizing proteins Family: Gelsolin-like
30	d2a90a2	Alignment	not modelled	11.1	43	Fold: WWE domain Superfamily: WWE domain Family: WWE domain
31	c3k13A	Alignment	not modelled	11.1	24	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydrofolate-homocysteine methyltransferase; PDBTitle: structure of the pterin-binding domain metr of 5-2 methyltetrahydrofolate-homocysteine methyltransferase from3 bacteroides thetaiotaomicron
32	d1lwub1	Alignment	not modelled	11.0	10	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
33	c3nztA	Alignment	not modelled	10.9	27	PDB header: ligase Chain: A: PDB Molecule: glutamate--cysteine ligase; PDBTitle: 2.0 angstrom crystal structure of glutamate--cysteine ligase (gsha)2 ffrom francisella tularensis in complex with amp
34	d2tsra	Alignment	not modelled	10.8	20	Fold: Thymidylate synthase/dCMP hydroxymethylase Superfamily: Thymidylate synthase/dCMP hydroxymethylase Family: Thymidylate synthase/dCMP hydroxymethylase
35	c1ei3E	Alignment	not modelled	10.8	15	PDB header: PDB COMPND:
36	c2dymE	Alignment	not modelled	10.6	17	PDB header: protein turnover/protein turnover Chain: E: PDB Molecule: autophagy protein 5; PDBTitle: the crystal structure of saccharomyces cerevisiae atg5-2 atg16(1-46) complex
37	c3fpjA	Alignment	not modelled	10.5	19	PDB header: biosynthetic protein, transferase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of e81q mutant of mtnas in complex with s-2 adenosylmethionine
38	d2czla1	Alignment	not modelled	10.5	12	Fold: Periplasmic binding protein-like II Superfamily: Periplasmic binding protein-like II Family: Phosphate binding protein-like
39	c3cz7A	Alignment	not modelled	10.3	16	PDB header: replication Chain: A: PDB Molecule: regulator of ty1 transposition protein 109; PDBTitle: molecular basis for the autoregulation of the protein acetyl2 transferase rtt109
40	c2zfnA	Alignment	not modelled	9.9	16	PDB header: transferase Chain: A: PDB Molecule: regulator of ty1 transposition protein 109; PDBTitle: self-acetylation mediated histone h3 lysine 56 acetylation by rtt109
41	c3mwbA	Alignment	not modelled	9.7	14	PDB header: lyase Chain: A: PDB Molecule: prephenate dehydratase; PDBTitle: the crystal structure of prephenate dehydratase in complex with l-phe2 from arthrobacter aureescens to 2.0a
42	d1kzfa	Alignment	not modelled	9.6	17	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: Autoinducer synthetase
43	c3luyA	Alignment	not modelled	9.4	20	PDB header: isomerase Chain: A: PDB Molecule: probable chorismate mutase; PDBTitle: putative chorismate mutase from bifidobacterium adolescentis
44	d1wh6a	Alignment	not modelled	9.4	22	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: CUT domain
45	d2it9a1	Alignment	not modelled	9.3	21	Fold: ssDNA-binding transcriptional regulator domain Superfamily: ssDNA-binding transcriptional regulator domain Family: PMN2A0962/syc2379c-like
46	c3ix6B	Alignment	not modelled	9.1	26	PDB header: transferase Chain: B: PDB Molecule: thymidylate synthase; PDBTitle: crystal structure of thymidylate synthase thya from brucella2 melitensis
47	c2hc9A	Alignment	not modelled	8.7	6	PDB header: hydrolase Chain: A: PDB Molecule: leucine aminopeptidase 1; PDBTitle: structure of caenorhabditis elegans leucine aminopeptidase-zinc2 complex (lap1)
48	c2a3zC	Alignment	not modelled	8.6	31	PDB header: structural protein Chain: C: PDB Molecule: wiskott-aldrich syndrome protein; PDBTitle: ternary complex of the wh2 domain of wasp with actin-dnase i
49	c2kerA	Alignment	not modelled	8.6	38	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: alpha-amylase inhibitor z-2685; PDBTitle: alpha-amylase inhibitor parvulustat (z-2685) from2 streptomyces parvulus
50	d1tf5a1	Alignment	not modelled	8.4	17	Fold: Pre-protein crosslinking domain of SecA Superfamily: Pre-protein crosslinking domain of SecA Family: Pre-protein crosslinking domain of SecA
51	d2o0ma1	Alignment	not modelled	8.3	9	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
52	c2o0mA	Alignment	not modelled	8.3	9	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, sorc family; PDBTitle: the crystal structure of the putative sorc family transcriptional2 regulator from enterococcus faecalis
53	d1nktA1	Alignment	not modelled	8.2	18	Fold: Pre-protein crosslinking domain of SecA Superfamily: Pre-protein crosslinking domain of SecA Family: Pre-protein crosslinking domain of SecA
54	d1ok0a	Alignment	not modelled	8.2	50	Fold: alpha-Amylase inhibitor tendamistat Superfamily: alpha-Amylase inhibitor tendamistat Family: alpha-Amylase inhibitor tendamistat

55	d1fzda_	Alignment	not modelled	8.0	10	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
56	d1uw4a_	Alignment	not modelled	8.0	4	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Smg-4/UPF3
57	d1v66a_	Alignment	not modelled	7.7	36	Fold: LEM/SAP HeH motif Superfamily: SAP domain Family: SAP domain
58	d1mljb1	Alignment	not modelled	7.5	15	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
59	c2e1nA_	Alignment	not modelled	7.5	23	PDB header: circadian clock protein Chain: A: PDB Molecule: pex; PDBTitle: crystal structure of the cyanobacterium circadian clock modifier pex
60	d2a90a1	Alignment	not modelled	7.5	7	Fold: WWE domain Superfamily: WWE domain Family: WWE domain
61	d2oz4a2	Alignment	not modelled	7.4	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
62	d1yvoa1	Alignment	not modelled	7.1	11	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
63	d1o6la_	Alignment	not modelled	7.0	15	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
64	d1oe4a_	Alignment	not modelled	6.8	30	Fold: Uracil-DNA glycosylase-like Superfamily: Uracil-DNA glycosylase-like Family: Single-strand selective monofunctional uracil-DNA glycosylase SMUG1
65	c3dwdB_	Alignment	not modelled	6.8	20	PDB header: transport protein Chain: B: PDB Molecule: adp-ribosylation factor gtpase-activating protein 1; PDBTitle: crystal structure of the arfgap domain of human arfgap1
66	d1t62a_	Alignment	not modelled	6.7	29	Fold: PUA domain-like Superfamily: PUA domain-like Family: Hypothetical protein EF3133
67	d2qqsa2	Alignment	not modelled	6.7	24	Fold: SH3-like barrel Superfamily: Tudor/PWWP/MBT Family: Tudor domain
68	c3jqxA_	Alignment	not modelled	6.7	9	PDB header: cell adhesion Chain: A: PDB Molecule: colh protein; PDBTitle: crystal structure of clostridium histolyticum colh collagenase2 collagen binding domain 3 at 2.2 angstrom resolution in the presence3 of calcium and cadmium
69	c3a9lB_	Alignment	not modelled	6.6	14	PDB header: hydrolase Chain: B: PDB Molecule: poly-gamma-glutamate hydrolase; PDBTitle: structure of bacteriophage poly-gamma-glutamate hydrolase
70	c3km3B_	Alignment	not modelled	6.6	19	PDB header: hydrolase Chain: B: PDB Molecule: deoxycytidine triphosphate deaminase; PDBTitle: crystal structure of eoxycytidine triphosphate deaminase from2 anaplasma phagocytophilum at 2.1a resolution
71	d1n6za_	Alignment	not modelled	6.5	40	Fold: Hypothetical protein Yml108w Superfamily: Hypothetical protein Yml108w Family: Hypothetical protein Yml108w
72	d1ufwa_	Alignment	not modelled	6.5	17	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
73	c1vbiA_	Alignment	not modelled	6.4	30	PDB header: oxidoreductase Chain: A: PDB Molecule: type 2 malate/lactate dehydrogenase; PDBTitle: crystal structure of type 2 malate/lactate dehydrogenase from thermus2 thermophilus hb8
74	d1tqza1	Alignment	not modelled	6.4	29	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Necap1 N-terminal domain-like
75	c1jjoE_	Alignment	not modelled	6.3	9	PDB header: signaling protein Chain: E: PDB Molecule: neuroserpin; PDBTitle: crystal structure of mouse neuroserpin (cleaved form)
76	c2yy8B_	Alignment	not modelled	6.1	17	PDB header: transferase Chain: B: PDB Molecule: upf0106 protein ph0461; PDBTitle: crystal structure of archaeal trna-methylase for position2 56 (atrm56) from pyrococcus horikoshii, complexed with s-3 adenosyl-l-methionine
77	c3m3nW_	Alignment	not modelled	6.1	31	PDB header: structural protein Chain: W: PDB Molecule: neural wiskott-aldrich syndrome protein; PDBTitle: structure of a longitudinal actin dimer assembled by tandem w domains
78	c3f02C_	Alignment	not modelled	6.0	14	PDB header: hydrolase inhibitor Chain: C: PDB Molecule: neuroserpin; PDBTitle: cleaved human neuroserpin
79	d1v8ha1	Alignment	not modelled	6.0	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: SoxZ-like
80	d1x4fa1	Alignment	not modelled	6.0	8	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
81	d1ua4a_	Alignment	not modelled	5.9	15	Fold: Ribokinase-like Superfamily: Ribokinase-like

					Family: ADP-specific Phosphofructokinase/Glucokinase
82	c3lyrA_	Alignment	not modelled	5.9	25 PDB header: transcription activator Chain: A: PDB Molecule: transcription factor coe1; PDBTitle: human early b-cell factor 1 (ebf1) dna-binding domain
83	c3kgbA_	Alignment	not modelled	5.9	15 PDB header: transferase Chain: A: PDB Molecule: thymidylate synthase 1/2; PDBTitle: crystal structure of thymidylate synthase 1/2 from encephalitozoon2 cuniculi at 2.2 a resolution
84	c2jx2A_	Alignment	not modelled	5.8	14 PDB header: transcription Chain: A: PDB Molecule: negative elongation factor e; PDBTitle: solution conformation of rna-bound nelf-e rrm
85	d1l2la_	Alignment	not modelled	5.8	18 Fold: Ribokinase-like Superfamily: Ribokinase-like Family: ADP-specific Phosphofructokinase/Glucokinase
86	c1deqO_	Alignment	not modelled	5.8	15 PDB header: PDB COMPND:
87	c3s9xA_	Alignment	not modelled	5.7	21 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: asch domain; PDBTitle: high resolution crystal structure of asch domain from lactobacillus2 crispatus jv v101
88	c2qsrA_	Alignment	not modelled	5.7	15 PDB header: transcription Chain: A: PDB Molecule: transcription-repair coupling factor; PDBTitle: crystal structure of c-terminal domain of transcription-repair2 coupling factor
89	d1umya_	Alignment	not modelled	5.6	27 Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
90	d2irfg_	Alignment	not modelled	5.5	30 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Interferon regulatory factor
91	c1hleB_	Alignment	not modelled	5.5	15 PDB header: hydrolase inhibitor(serine proteinase) Chain: B: PDB Molecule: horse leukocyte elastase inhibitor; PDBTitle: crystal structure of cleaved equine leucocyte elastase2 inhibitor determined at 1.95 angstroms resolution
92	c2bn5A_	Alignment	not modelled	5.5	50 PDB header: nuclear protein Chain: A: PDB Molecule: psi; PDBTitle: p-element somatic inhibitor protein complex with u1-70k2 proline-rich peptide
93	d1duvg1	Alignment	not modelled	5.5	22 Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
94	d2o4aa1	Alignment	not modelled	5.4	9 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: CUT domain
95	d1px5a1	Alignment	not modelled	5.4	18 Fold: PAP/OAS1 substrate-binding domain Superfamily: PAP/OAS1 substrate-binding domain Family: 2'-5'-oligoadenylate synthetase 1, OAS1, second domain
96	d1tswa_	Alignment	not modelled	5.4	23 Fold: Thymidylate synthase/dCMP hydroxymethylase Superfamily: Thymidylate synthase/dCMP hydroxymethylase Family: Thymidylate synthase/dCMP hydroxymethylase
97	d2b4jc1	Alignment	not modelled	5.3	9 Fold: N-cbl like Superfamily: HIV integrase-binding domain Family: HIV integrase-binding domain
98	c1wtjB_	Alignment	not modelled	5.3	15 PDB header: oxidoreductase Chain: B: PDB Molecule: ureidoglycolate dehydrogenase; PDBTitle: crystal structure of delta1-piperidine-2-carboxylate2 reductase from pseudomonas syringae pvar.tomato
99	c2h4qB_	Alignment	not modelled	5.3	20 PDB header: hydrolase inhibitor Chain: B: PDB Molecule: heterochromatin-associated protein ment; PDBTitle: crystal structure of a m-loop deletion variant of ment in2 the cleaved conformation