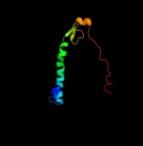
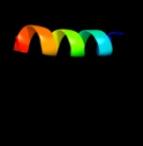
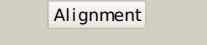
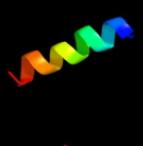


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P52138
Date	Thu Jan 5 12:05:42 GMT 2012
Unique Job ID	a9a9e7ecdfecb970

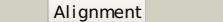
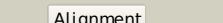
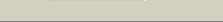
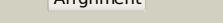
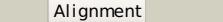
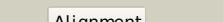
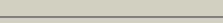
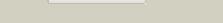
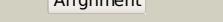
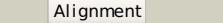
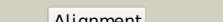
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1l6sa_			48.1	36	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
2	c1yewF_			26.0	30	PDB header: oxidoreductase, membrane protein Chain: F; PDB Molecule: particulate methane monooxygenase, a subunit; PDBTitle: crystal structure of particulate methane monooxygenase
3	c3chxF_			25.3	24	PDB header: membrane protein Chain: F; PDB Molecule: pmoa; PDBTitle: crystal structure of methylosinus trichosporum ob3b2 particulate methane monooxygenase (pmo)
4	c3l4cB_			20.0	39	PDB header: cell adhesion, cell invasion, apoptosis Chain: B; PDB Molecule: dedicator of cytokinesis protein 1; PDBTitle: structural basis of membrane-targeting by dock180
5	c1zikB_			19.6	60	PDB header: leucine zipper Chain: B; PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn161lys in the dimeric2 state
6	c1zikA_			19.2	60	PDB header: leucine zipper Chain: A; PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn161lys in the dimeric2 state
7	d1x6aa2			18.9	35	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
8	c1wyvB_			17.9	29	PDB header: viral protein Chain: B; PDB Molecule: e2 glycoprotein; PDBTitle: post-fusion hairpin conformation of the sars coronavirus spike2 glycoprotein
9	c2gohA_			17.3	35	PDB header: viral protein Chain: A; PDB Molecule: vpu protein; PDBTitle: three-dimensional structure of the trans-membrane domain of2 vpu from hiv-1 in aligned phospholipid bicontinuous
10	c1pjea_			17.3	35	PDB header: viral protein Chain: A; PDB Molecule: vpu protein; PDBTitle: structure of the channel-forming trans-membrane domain of2 virus protein "u"(vpu) from hiv-1
11	c1pi8A_			17.3	35	PDB header: viral protein Chain: A; PDB Molecule: vpu protein; PDBTitle: structure of the channel-forming trans-membrane domain of2 virus protein "u" (vpu) from hiv-1

12	c1pi7A			17.3	35	PDB header: viral protein Chain: A: PDB Molecule: vpu protein; PDBTitle: structure of the channel-forming trans-membrane domain of2 virus protein "u" (vpu) from hiv-1
13	c2gofA			17.3	35	PDB header: viral protein Chain: A: PDB Molecule: vpu protein; PDBTitle: three-dimensional structure of the trans-membrane domain of2 vpu from hiv-1 in aligned phospholipid bicolles
14	c2vpvA			16.7	19	PDB header: cell cycle Chain: A: PDB Molecule: protein mif2; PDBTitle: dimerization domain of mif2p
15	c1ziiB			14.8	57	PDB header: leucine zipper Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16aba in the dimeric2 state
16	c1ziiA			14.8	57	PDB header: leucine zipper Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16aba in the dimeric2 state
17	c3mhvC			14.6	67	PDB header: protein transport Chain: C: PDB Molecule: vacuolar protein sorting-associated protein 4; PDBTitle: crystal structure of vps4 and vta1
18	c1zijA			14.5	57	PDB header: leucine zipper Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16aba in the trimeric2 state
19	c1u24A			14.5	30	PDB header: hydrolase Chain: A: PDB Molecule: myo-inositol hexaphosphate phosphohydrolase; PDBTitle: crystal structure of selenomonas ruminantium phytase
20	c2dzoD			14.2	56	PDB header: protein binding Chain: D: PDB Molecule: 26s protease regulatory subunit 6b homolog; PDBTitle: crystal structure analysis of yeast nas6p complexed with2 the proteasome subunit, rpt3
21	c1no7A		not modelled	14.2	21	PDB header: viral protein Chain: A: PDB Molecule: major capsid protein; PDBTitle: structure of the large protease resistant upper domain of2 vp5, the major capsid protein of herpes simplex virus-1
22	d1no7a		not modelled	14.2	21	Fold: Major capsid protein VP5 Superfamily: Major capsid protein VP5 Family: Major capsid protein VP5
23	d1vh3a		not modelled	14.2	26	Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases Family: Cytidylyltransferase
24	c1zijC		not modelled	14.1	57	PDB header: leucine zipper Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16aba in the trimeric2 state
25	c1zijB		not modelled	13.7	57	PDB header: leucine zipper Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16aba in the trimeric2 state
26	d1ou5a2		not modelled	13.6	37	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
27	c1piqA		not modelled	13.3	47	PDB header: dna binding protein Chain: A: PDB Molecule: protein (general control protein gcn4-piq); PDBTitle: crystal structure of gcn4-piq, a trimeric coiled coil with buried2 polar residues
28	c2dvwB		not modelled	13.2	56	PDB header: cell cycle/protein-binding Chain: B: PDB Molecule: 26s protease regulatory subunit 6b; PDBTitle: structure of the oncoprotein gankyrin in complex with s62 atpase of the 26s proteasome

29	c3nica	Alignment	not modelled	13.1	44	PDB header: hydrolase/dna Chain: A: PDB Molecule: eco29kir; PDBTitle: dna binding and cleavage by the giy-yig endonuclease r.eco29ki2 inactive variant y49f
30	c3jycA	Alignment	not modelled	13.0	13	PDB header: metal transport Chain: A: PDB Molecule: inward-rectifier k+ channel kir2.2; PDBTitle: crystal structure of the eukaryotic strong inward-rectifier k+ channel kir2.2 at 3.1 angstrom resolution
31	d1vfga2	Alignment	not modelled	12.8	37	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
32	d2r8ca1	Alignment	not modelled	12.8	25	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: Zn-dependent arginine carboxypeptidase-like
33	c1w5jB	Alignment	not modelled	12.7	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: an anti-parallel four helix bundle
34	c1w5jD	Alignment	not modelled	12.7	47	PDB header: four helix bundle Chain: D: PDB Molecule: general control protein gcn4; PDBTitle: an anti-parallel four helix bundle
35	c1w5jA	Alignment	not modelled	12.7	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: an anti-parallel four helix bundle
36	c1w5jC	Alignment	not modelled	12.7	47	PDB header: four helix bundle Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: an anti-parallel four helix bundle
37	c2voyG	Alignment	not modelled	12.6	38	PDB header: hydrolase Chain: G: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: cryoem model of copa, the copper transporting atpase from2 archaeoglobus fulgidus
38	d1vi7a2	Alignment	not modelled	11.9	50	Fold: Ferrodoxin-like Superfamily: EF-G C-terminal domain-like Family: YigZ C-terminal domain-like
39	c3hriE	Alignment	not modelled	11.7	20	PDB header: ligase Chain: F: PDB Molecule: histidyl-tRNA synthetase; PDBTitle: histidyl-tRNA synthetase (apo) from trypanosoma brucei
40	d1kmma2	Alignment	not modelled	11.6	22	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
41	c1gclA	Alignment	not modelled	11.5	47	PDB header: leucine zipper Chain: A: PDB Molecule: gcn4; PDBTitle: gcn4 leucine zipper core mutant p-li
42	c1gcmA	Alignment	not modelled	11.5	47	PDB header: transcription regulation Chain: A: PDB Molecule: gcn4p-i; PDBTitle: gcn4 leucine zipper core mutant p-li
43	d1bg3a2	Alignment	not modelled	11.3	26	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
44	c1uo3B	Alignment	not modelled	11.2	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
45	c1z1IA	Alignment	not modelled	11.2	53	PDB header: leucine zipper Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16gln in the dimeric2 state
46	d1ayra2	Alignment	not modelled	11.2	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
47	c1gcID	Alignment	not modelled	11.1	47	PDB header: leucine zipper Chain: D: PDB Molecule: gcn4; PDBTitle: gcn4 leucine zipper core mutant p-li
48	c1gclB	Alignment	not modelled	11.1	47	PDB header: leucine zipper Chain: B: PDB Molecule: gcn4; PDBTitle: gcn4 leucine zipper core mutant p-li
49	c1gclC	Alignment	not modelled	11.1	47	PDB header: leucine zipper Chain: C: PDB Molecule: gcn4; PDBTitle: gcn4 leucine zipper core mutant p-li
50	c1unuB	Alignment	not modelled	11.1	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
51	c1unuA	Alignment	not modelled	11.1	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
52	c1uo5A	Alignment	not modelled	11.0	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
53	c1uo5B	Alignment	not modelled	11.0	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
54	c1unxA	Alignment	not modelled	11.0	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
55	c1zimA	Alignment	not modelled	10.9	53	PDB header: leucine zipper Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16gln in the

56	c2ahpB	Alignment	not modelled	10.8	53	trimeric2 state PDB header: de novo protein Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper, mutation of lys15 to epsilon-azido-lys
57	c1zilB	Alignment	not modelled	10.8	53	PDB header: leucine zipper Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16gln in the dimeric2 state
58	c1gcmB	Alignment	not modelled	10.8	47	PDB header: transcription regulation Chain: B: PDB Molecule: gcn4p-ii; PDBTitle: gcn4 leucine zipper core mutant p-ii
59	d2pt0a1	Alignment	not modelled	10.7	34	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Myo-inositol hexaphosphate phosphohydrolase (phytase) PhyA
60	c1w5iA	Alignment	not modelled	10.7	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: aba does not affect topology of pli.
61	c1uo2A	Alignment	not modelled	10.7	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
62	c1untA	Alignment	not modelled	10.7	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
63	c1ld4E	Alignment	not modelled	10.6	53	PDB header: virus Chain: E: PDB Molecule: general control protein gcn4; PDBTitle: placement of the structural proteins in sindbis virus
64	c2ahpA	Alignment	not modelled	10.6	53	PDB header: de novo protein Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4 leucine zipper, mutation of lys15 to epsilon-azido-lys
65	c3t47A	Alignment	not modelled	10.5	53	PDB header: immune system Chain: A: PDB Molecule: scin-d; PDBTitle: crystal structure of truncated form of staphylococcal complement2 inhibitor d (scin-d) at 1.3 angstrom
66	c1gcmC	Alignment	not modelled	10.5	47	PDB header: transcription regulation Chain: C: PDB Molecule: gcn4p-ii; PDBTitle: gcn4 leucine zipper core mutant p-ii
67	c1uo1B	Alignment	not modelled	10.5	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
68	c1uo1A	Alignment	not modelled	10.5	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
69	c1zimB	Alignment	not modelled	10.5	53	PDB header: leucine zipper Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16gln in the trimeric2 state
70	c1zimC	Alignment	not modelled	10.5	53	PDB header: leucine zipper Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant asn16gln in the trimeric2 state
71	c1unwB	Alignment	not modelled	10.4	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
72	c1uo0A	Alignment	not modelled	10.4	47	PDB header: four helix bundle Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
73	c1uo0B	Alignment	not modelled	10.4	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
74	c1w5iB	Alignment	not modelled	10.4	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: aba does not affect topology of pli.
75	c1uo2B	Alignment	not modelled	10.4	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
76	c1untB	Alignment	not modelled	10.4	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
77	d1ejxc1	Alignment	not modelled	10.4	25	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: alpha-Subunit of urease
78	c3m4wH	Alignment	not modelled	10.4	100	PDB header: signaling protein/signaling protein Chain: H: PDB Molecule: sigma-e factor negative regulatory protein; PDBTitle: structural basis for the negative regulation of bacterial stress2 response by rseB
79	c2hdIA	Alignment	not modelled	10.3	42	PDB header: cytokine Chain: A: PDB Molecule: small inducible cytokine b14; PDBTitle: solution structure of brak/cxcl14
80	c1unyB	Alignment	not modelled	10.3	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
81	d1tsfa	Alignment	not modelled	10.2	33	Fold: Rof/RNase P subunit-like Superfamily: Rof/RNase P subunit-like Family: RNase P subunit p29-like

82	c3iabA		Alignment	not modelled	10.2	24	PDB header: hydrolase/rna Chain: A: PDB Molecule: ribonucleases p/mrp protein subunit pop6; PDBTitle: crystal structure of rnase p /rnase mrp proteins pop6, pop72 in a complex with the p3 domain of rnase mrp rna
83	d1m7ja1		Alignment	not modelled	10.2	16	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: D-aminoacylase
84	d2chha1		Alignment	not modelled	10.1	32	Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin
85	c1swiC		Alignment	not modelled	10.1	53	PDB header: leucine zipper Chain: C: PDB Molecule: gcn4p1; PDBTitle: gcn4-leucine zipper core mutant as n16a complexed with2 benzene
86	c1unxB		Alignment	not modelled	10.0	47	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: structure based engineering of internal molecular surfaces2 of four helix bundles
87	d1miwa2		Alignment	not modelled	10.0	53	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
88	c2ztaA		Alignment	not modelled	9.9	53	PDB header: leucine zipper Chain: A: PDB Molecule: gcn4 leucine zipper; PDBTitle: x-ray structure of the gcn4 leucine zipper, a two-stranded,2 parallel coiled coil
89	c2ztaB		Alignment	not modelled	9.9	53	PDB header: leucine zipper Chain: B: PDB Molecule: gcn4 leucine zipper; PDBTitle: x-ray structure of the gcn4 leucine zipper, a two-stranded,2 parallel coiled coil
90	d1r11a3		Alignment	not modelled	9.9	44	Fold: MutS N-terminal domain-like Superfamily: tRNA-intron endonuclease N-terminal domain-like Family: tRNA-intron endonuclease N-terminal domain-like
91	clu9fa		Alignment	not modelled	9.8	46	PDB header: transcription Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: heterocyclic peptide backbone modification in gcn4-pli based coiled2 coils: replacement of k(15)(16)
92	c1ij2A		Alignment	not modelled	9.8	53	PDB header: transcription Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-pvt coiled-coil trimer with threonine at the a(16)2 position
93	d1ts9a		Alignment	not modelled	9.8	36	Fold: Rof/RNase P subunit-like Superfamily: Rof/RNase P subunit-like Family: RNase P subunit p29-like
94	c1rb4C		Alignment	not modelled	9.7	53	PDB header: dna binding protein Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: antiparallel trimer of gcn4-leucine zipper core mutant as2 n16a tetragonal automatic solution
95	d1dl6a		Alignment	not modelled	9.6	38	Fold: Rubredoxin-like Superfamily: Zinc beta-ribbon Family: Transcriptional factor domain
96	c1swiB		Alignment	not modelled	9.5	53	PDB header: leucine zipper Chain: B: PDB Molecule: gcn4p1; PDBTitle: gcn4-leucine zipper core mutant as n16a complexed with2 benzene
97	c1rb1C		Alignment	not modelled	9.5	53	PDB header: dna binding protein Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant as n16a trigonal automatic2 solution
98	c3k7zC		Alignment	not modelled	9.5	53	PDB header: dna binding protein Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant as n16a trigonal automatic2 solution
99	c1p0gA		Alignment	not modelled	9.5	39	PDB header: ribosome Chain: A: PDB Molecule: 19-mer peptide from 50s ribosomal protein l1; PDBTitle: structure of antimicrobial peptide, hp (2-20) and its2 analogues derived from helicobacter pylori, as determined3 by 1h nmr spectroscopy