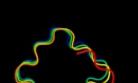


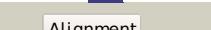
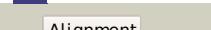
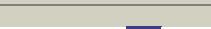
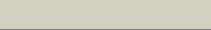
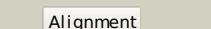
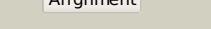
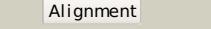
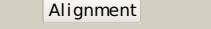
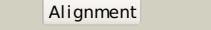
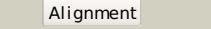
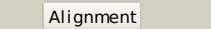
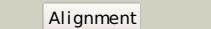
Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P39220
Date	Thu Jan 5 11:58:32 GMT 2012
Unique Job ID	5b6999045ef68bf5

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3xbA_	Alignment		96.6	23	PDB header: signaling protein Chain: A: PDB Molecule: protein sifa; PDBTitle: crystal structure of sifa and skip
2	c3n90A_	Alignment		47.0	18	PDB header: unknown function Chain: A: PDB Molecule: thylakoid lumenal 15 kda protein 1, chloroplastic; PDBTitle: the 1.7 angstrom resolution crystal structure of at2g44920, a2 pentapeptide repeat protein from arabidopsis thaliana thylakoid3 lumen.
3	d2j8ia1	Alignment		43.0	20	Fold: Single-stranded right-handed beta-helix Superfamily: Pentapeptide repeat-like Family: Pentapeptide repeats
4	c1v0dA_	Alignment		32.0	22	PDB header: hydrolase Chain: A: PDB Molecule: dna fragmentation factor 40 kda subunit; PDBTitle: crystal structure of caspase-activated dnase (cad)
5	d1v0da_	Alignment		32.0	22	Fold: His-Me finger endonucleases Superfamily: His-Me finger endonucleases Family: Caspase-activated DNase, CAD (DffB, DFF40)
6	d2fvka1	Alignment		27.0	14	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: Hydantoinase (dihydropyrimidinase)
7	d2j8ka1	Alignment		25.0	29	Fold: Single-stranded right-handed beta-helix Superfamily: Pentapeptide repeat-like Family: Pentapeptide repeats
8	c2j8ib_	Alignment		18.1	20	PDB header: toxin Chain: B: PDB Molecule: np275; PDBTitle: structure of np275, a pentapeptide repeat protein from2 nostoc punctiforme
9	c2xtwB_	Alignment		15.9	14	PDB header: cell cycle Chain: B: PDB Molecule: qnrB1; PDBTitle: structure of qnrB1 (full length), a plasmid-mediated2 fluoroquinolone resistance protein
10	c2j8kA_	Alignment		15.0	29	PDB header: toxin Chain: A: PDB Molecule: np275-np276; PDBTitle: structure of the fusion of np275 and np276, pentapeptide2 repeat proteins from nostoc punctiforme
11	c3du1X_	Alignment		14.1	29	PDB header: structural protein Chain: X: PDB Molecule: all3740 protein; PDBTitle: the 2.0 angstrom resolution crystal structure of hetl, a pentapeptide2 repeat protein involved in heterocyst differentiation regulation from3 the cyanobacterium nostoc sp. strain pcc 7120

12	c2jx3A_			14.1	24	PDB header: dna binding protein Chain: A: PDB Molecule: protein dek; PDBTitle: nmr solution structure of the n-terminal domain of dek
13	c1soxB_			13.8	13	PDB header: oxidoreductase Chain: B: PDB Molecule: sulfite oxidase; PDBTitle: sulfite oxidase from chicken liver
14	d1zh5a1			13.2	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
15	c1i8nA_			13.1	48	PDB header: toxin Chain: A: PDB Molecule: anti-platelet protein; PDBTitle: crystal structure of leech anti-platelet protein
16	d1i8na_			13.1	48	Fold: Hairpin loop containing domain-like Superfamily: Hairpin loop containing domain-like Family: Anti-platelet protein
17	c2o6wA_			12.9	18	PDB header: unknown function Chain: A: PDB Molecule: repeat five residue (rfr) protein or PDBTitle: crystal structure of a pentapeptide repeat protein (rfr23)2 from the cyanobacterium cyanothecae 51142
18	d2f3la1			11.8	24	Fold: Single-stranded right-handed beta-helix Superfamily: Pentapeptide repeat-like Family: Pentapeptide repeats
19	d1tuaa2			11.6	10	Fold: Eukaryotic type KH-domain (KH-domain type I) Superfamily: Eukaryotic type KH-domain (KH-domain type I) Family: Eukaryotic type KH-domain (KH-domain type I)
20	c1nh1A_			11.4	27	PDB header: avirulence protein Chain: A: PDB Molecule: avirulence b protein; PDBTitle: crystal structure of the type iii effector avrb from2 pseudomonas syringae.
21	d1nh1a_		not modelled	11.4	27	Fold: Antivirulence factor Superfamily: Antivirulence factor Family: Antivirulence factor
22	c3ia0c_		not modelled	11.3	26	PDB header: structural protein Chain: C: PDB Molecule: ethanolamine utilization protein euts; PDBTitle: ethanolamine utilization microcompartment shell subunit,2 euts-g39v mutant PDB header: unknown function Chain: A: PDB Molecule: pentapeptide repeat protein; PDBTitle: crystal structure of a luminal pentapeptide repeat protein from2 cyanothecae sp 51142 at 2.3 angstrom resolution. tetragonal crystal3 form
23	c2g0yA_		not modelled	11.1	18	PDB header: hydrolase Chain: A: PDB Molecule: inorganic pyrophosphatase; PDBTitle: crystal structure of inorganic pyrophosphatase from2 ehrlichia chaffeensis
24	c3lo0A_		not modelled	10.9	28	PDB header: hydrolase Chain: E: PDB Molecule: formamidase; PDBTitle: gamma lactamase from delphnia acidovorans
25	c2wknE_		not modelled	10.7	31	PDB header: transferase Chain: A: PDB Molecule: mannosyl-3-phosphoglycerate synthase; PDBTitle: h309a mutant of mannosyl-3-phosphoglycerate synthase from2 thermus thermophilus hb27 in complex with3 gdp-alpha-d-mannose and mg(ii)
26	c2wvmA_		not modelled	9.6	53	PDB header: cell cycle Chain: B: PDB Molecule: mcbg-like protein; PDBTitle: structure of the pentapeptide repeat protein albg, a2 resistance factor for the topoisomerase poison albicidin.
27	c2xt4B_		not modelled	9.4	14	PDB header: transcription Chain: A: PDB Molecule: non-structural protein; PDBTitle: the crystal structure of porcine reproductive and2
28	c3ifuA_		not modelled	9.1	26	

						respiratory syndrome virus (prssv) leader protease nsp1
29	d1yj5a1		Alignment	not modelled	9.0	20 Fold: HAD-like Superfamily: HAD-like Family: phosphatase domain of polynucleotide kinase
30	c2xt4A_		Alignment	not modelled	8.7	11 PDB header: cell cycle Chain: A: PDB Molecule: mcbg-like protein; PDBTitle: structure of the pentapeptide repeat protein albg, a2 resistance factor for the topoisomerase poison albicidin.
31	c3mjjD_		Alignment	not modelled	8.5	26 PDB header: hydrolase Chain: D: PDB Molecule: predicted acetamidase/formamidase; PDBTitle: crystal structure analysis of a recombinant predicted acetamidase/formamidase from the thermophile thermoanaerobacter3 tengcongensis
32	d1isia_		Alignment	not modelled	8.4	21 Fold: Flavodoxin-like Superfamily: N-(deoxy)ribosyltransferase-like Family: ADP ribosyl cyclase-like
33	d1j2za_		Alignment	not modelled	8.4	15 Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase
34	c2w7zB_		Alignment	not modelled	8.3	21 PDB header: inhibitor Chain: B: PDB Molecule: pentapeptide repeat family protein; PDBTitle: structure of the pentapeptide repeat protein efsqr, a dna2 gyrase inhibitor. free amines modified by cyclic3 pentylation with glutaraldehyde.
35	c3t2dA_		Alignment	not modelled	8.0	41 PDB header: lyase, hydrolase Chain: A: PDB Molecule: fructose-1,6-bisphosphate aldolase/phosphatase; PDBTitle: fructose-1,6-bisphosphate aldolase/phosphatase from thermoproteus2 neutophilus, fbp-bound form
36	c1jrjA_		Alignment	not modelled	8.0	26 PDB header: hormone/growth factor Chain: A: PDB Molecule: exendin-4; PDBTitle: solution structure of exendin-4 in 30-vol% trifluoroethanol
37	c3b9eA_		Alignment	not modelled	7.9	26 PDB header: hydrolase Chain: A: PDB Molecule: chitinase a; PDBTitle: crystal structure of inactive mutant e315m chitinase a from2 vibrio harveyi
38	c3b9tD_		Alignment	not modelled	7.9	40 PDB header: hydrolase Chain: D: PDB Molecule: twin-arginine translocation pathway signal protein; PDBTitle: crystal structure of predicted acetamidase/formamidase (yp_546212.1)2 from methylobacillus flagellatus kt at 1.58 a resolution
39	c2zu8A_		Alignment	not modelled	7.6	47 PDB header: transferase Chain: A: PDB Molecule: mannosyl-3-phosphoglycerate synthase; PDBTitle: crystal structure of mannosyl-3-phosphoglycerate synthase2 from pyrococcus horikoshii
40	c3pssB_		Alignment	not modelled	7.6	17 PDB header: cell cycle Chain: B: PDB Molecule: qnr; PDBTitle: crystal structure of ahqn, the qnr protein from aeromonas hydrophila2 (p21 crystal form)
41	c2eg9B_		Alignment	not modelled	7.1	26 PDB header: hydrolase Chain: B: PDB Molecule: adp-ribosyl cyclase 1; PDBTitle: crystal structure of the truncated extracellular domain of2 mouse cd38
42	d2cqka1		Alignment	not modelled	7.1	15 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
43	d1xnta_		Alignment	not modelled	6.9	27 Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: N-terminal domain of xrcc1
44	c1xnaA_		Alignment	not modelled	6.9	27 PDB header: dna binding protein Chain: A: PDB Molecule: protein (dna-repair protein xrcc1); PDBTitle: nmr solution structure of the single-strand break repair2 protein xrcc1-n-terminal domain
45	d1sura_		Alignment	not modelled	6.8	16 Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PAPS reductase-like
46	c3n3fB_		Alignment	not modelled	6.7	14 PDB header: protein binding Chain: B: PDB Molecule: collagen alpha-1(xv) chain; PDBTitle: crystal structure of the human collagen xv trimerization domain: a2 potent trimerizing unit common to multiplexin collagens
47	c2xz2A_		Alignment	not modelled	6.6	26 PDB header: rna-binding protein Chain: A: PDB Molecule: cstf-50, isoform b; PDBTitle: crystal structure of cstf-50 homodimerization domain
48	c2vbeA_		Alignment	not modelled	6.6	39 PDB header: viral protein Chain: A: PDB Molecule: tailspike-protein; PDBTitle: tailspike protein of bacteriophage sf6
49	c3cgiD_		Alignment	not modelled	6.4	50 PDB header: unknown function Chain: D: PDB Molecule: propanediol utilization protein pdu; PDBTitle: crystal structure of the pdu shell protein from the pdu2 microcompartment
50	d1hs5a_		Alignment	not modelled	6.4	34 Fold: p53 tetramerization domain Superfamily: p53 tetramerization domain Family: p53 tetramerization domain
51	c2goyC_		Alignment	not modelled	6.4	22 PDB header: oxidoreductase Chain: C: PDB Molecule: adenosine phosphosulfate reductase; PDBTitle: crystal structure of assimilatory adenosine 5'-2' phosphosulfate reductase with bound aps
52	c1d0rA_		Alignment	not modelled	6.3	26 PDB header: hormone/growth factor Chain: A: PDB Molecule: glucagon-like peptide-1-(7-36)-amide; PDBTitle: solution structure of glucagon-like peptide-1-(7-36)-amide2 in trifluoroethanol/water
53	c2bhlB_		Alignment	not modelled	6.3	43 PDB header: oxidoreductase (choh-d-nadp) Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose-6-phosphate dehydrogenase2 (deletion variant) complexed with glucose-6-

						phosphate
54	c1yj5B_		not modelled	6.3	20	PDB header: transferase Chain: B: PDB Molecule: 5' polynucleotide kinase-3' phosphatase catalytic domain; PDBTitle: molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme
55	d2alja1		not modelled	6.2	17	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
56	c3nb2B_		not modelled	6.1	25	PDB header: ligase Chain: B: PDB Molecule: secreted effector protein; PDBTitle: crystal structure of e. coli o157:h7 effector protein nleA
57	c2j9wB_		not modelled	6.1	19	PDB header: protein transport Chain: B: PDB Molecule: vps28-prov protein; PDBTitle: structural insight into the escrt-i-ii link and its role in2 mvb trafficking
58	d1khia2		not modelled	6.1	36	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
59	d1whra_		not modelled	6.0	14	Fold: IF3-like Superfamily: R3H domain Family: R3H domain
60	d1wvfa1		not modelled	5.9	31	Fold: Ferredoxin-like Superfamily: FAD-linked oxidases, C-terminal domain Family: Vanillyl-alcohol oxidase-like
61	d2f4la1		not modelled	5.8	24	Fold: CUB-like Superfamily: Acetamidase/Formamidase-like Family: Acetamidase/Formamidase-like
62	c3hugl_		not modelled	5.8	30	PDB header: transcription/membrane protein Chain: J: PDB Molecule: probable conserved membrane protein; PDBTitle: crystal structure of mycobacterium tuberculosis anti-sigma factor rslA2 in complex with -35 promoter binding domain of sigI
63	d1edqa2		not modelled	5.8	25	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Type II chitinase
64	d2bm5a1		not modelled	5.7	4	Fold: Single-stranded right-handed beta-helix Superfamily: Pentapeptide repeat-like Family: Pentapeptide repeats
65	d1mjea2		not modelled	5.7	28	Fold: BRCA2 tower domain Superfamily: BRCA2 tower domain Family: BRCA2 tower domain
66	c2c1tA_		not modelled	5.6	17	PDB header: protein transport/membrane protein Chain: A: PDB Molecule: importin alpha subunit; PDBTitle: structure of the kap60p:nup2 complex
67	c1qk1E_		not modelled	5.6	43	PDB header: oxidoreductase Chain: E: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose 6-phosphate dehydrogenase2 (variant canton r459l) complexed with structural nadp+
68	d1r4pb_		not modelled	5.5	39	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
69	d1l8na1		not modelled	5.5	45	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: alpha-D-glucuronidase/Hyaluronidase catalytic domain
70	d2ef1a1		not modelled	5.5	23	Fold: Flavodoxin-like Superfamily: N-(deoxy)ribosyltransferase-like Family: ADP ribosyl cyclase-like
71	d1c4qa_		not modelled	5.3	33	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
72	d1zs4a1		not modelled	5.3	23	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Bacteriophage CII protein
73	c2o8vA_		not modelled	5.2	21	PDB header: oxidoreductase Chain: A: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: paps reductase in a covalent complex with thioredoxin c35a