
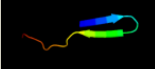
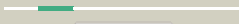
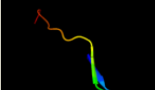







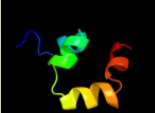
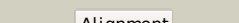
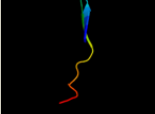

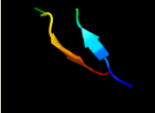




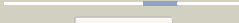

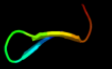
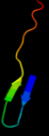





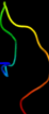



Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	A1Z6I9
Date	Tue Jan 22 12:00:06 GMT 2013
Unique Job ID	e856bc3d2f8076dd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2xr1B_	 Alignment		43.6	25	PDB header: hydrolase Chain: B: PDB Molecule: cleavage and polyadenylation specificity factor 100 kd PDBTitle: dimeric archaeal cleavage and polyadenylation specificity2 factor with n-terminal kh domains (kh-cpsf) from methanosarcina3 mazei
2	c3af5A_	 Alignment		41.0	30	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein ph1404; PDBTitle: the crystal structure of an archaeal cpsf subunit, ph1404 from2 pyrococcus horikoshii
3	d1ynha1	 Alignment		40.0	100	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Succinylarginine dihydrolase-like
4	d1v5ka_	 Alignment		37.4	33	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
5	c2az4A_	 Alignment		33.2	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ef2904; PDBTitle: crystal structure of a protein of unknown function from enterococcus2 faecalis v583
6	d1ej2a_	 Alignment		32.3	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Adenylyltransferase
7	c2xr1A_	 Alignment		30.9	25	PDB header: hydrolase Chain: A: PDB Molecule: cleavage and polyadenylation specificity factor 100 kd PDBTitle: dimeric archaeal cleavage and polyadenylation specificity2 factor with n-terminal kh domains (kh-cpsf) from methanosarcina3 mazei
8	c1w0pA_	 Alignment		29.2	75	PDB header: hydrolase Chain: A: PDB Molecule: sialidase; PDBTitle: vibrio cholerae sialidase with alpha-2,6-sialyllactose
9	c1wyoA_	 Alignment		22.9	28	PDB header: structural protein Chain: A: PDB Molecule: microtubule-associated protein rp/eb family PDBTitle: solution structure of the ch domain of human microtubule-2 associated protein rp/eb family member 3
10	d2qjza1	 Alignment		21.7	32	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
11	c3elkA_	 Alignment		21.5	23	PDB header: transcription regulator Chain: A: PDB Molecule: putative transcriptional regulator ta0346; PDBTitle: crystal structure of putative transcriptional regulator ta0346 from2 thermoplasma acidophilum

12	c2bibA	Alignment		20.4	53	PDB header: hydrolase Chain: A: PDB Molecule: teichoic acid phosphorylcholine esterase/ choline binding PDBTitle: crystal structure of the complete modular teichoic acid2 phosphorylcholine esterase pce (cbpe) from streptococcus3 pneumoniae
13	c2ycbA	Alignment		20.0	30	PDB header: hydrolase Chain: A: PDB Molecule: cleavage and polyadenylation specificity factor; PDBTitle: structure of the archaeal beta-casp protein with n-terminal2 kh domains from methanothermobacter thermautotrophicus
14	c2e1nA	Alignment		18.5	19	PDB header: circadian clock protein Chain: A: PDB Molecule: pex; PDBTitle: crystal structure of the cyanobacterium circadian clock modifier pex
15	c2dqlA	Alignment		17.8	15	PDB header: circadian clock protein Chain: A: PDB Molecule: pex protein; PDBTitle: crytal structure of the circadian clock associated protein2 pex from anaena
16	d1jjcb3	Alignment		16.8	35	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Myf domain
17	c3l7wA	Alignment		15.4	29	PDB header: transcription Chain: A: PDB Molecule: putative uncharacterized protein smu.1704; PDBTitle: the crystal structure of smu.1704 from streptococcus mutans ua159
18	d1ewsA	Alignment		14.9	35	Fold: Defensin-like Superfamily: Defensin-like Family: Defensin
19	c1ewsA	Alignment		14.9	35	PDB header: antimicrobial protein Chain: A: PDB Molecule: rk-1 defensin; PDBTitle: the three-dimensional solution structure of the rabbit2 kidney defensin, rk-1
20	c1tnuL	Alignment		14.6	12	PDB header: transferase Chain: L: PDB Molecule: geranylgeranyl transferase type i beta subunit; PDBTitle: rat protein geranylgeranyltransferase type-i complexed with2 a gppp analog and a gcinckvl peptide derived from rhob
21	d1n4qb	Alignment	not modelled	14.6	12	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Protein prenyltransferases
22	d2h6fb1	Alignment	not modelled	14.5	18	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Protein prenyltransferases
23	d2i7xa1	Alignment	not modelled	14.3	24	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: beta-CASP RNA-metabolising hydrolases
24	c2i7xA	Alignment	not modelled	14.3	24	PDB header: rna binding protein, protein binding Chain: A: PDB Molecule: protein cft2; PDBTitle: structure of yeast cpsf-100 (ydh1p)
25	c1ztnC	Alignment	not modelled	14.1	29	PDB header: viral protein Chain: C: PDB Molecule: fusion glycoprotein; PDBTitle: structure of the uncleaved paramyxovirus (hpiv3) fusion protein
26	d1u7na	Alignment	not modelled	14.1	39	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: PLsX-like
27	c3aygA	Alignment	not modelled	13.8	31	PDB header: oxidoreductase Chain: A: PDB Molecule: nitric oxide reductase; PDBTitle: crystal structure of nitric oxide reductase complex with hqno
28	d2esha1	Alignment	not modelled	13.4	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PadR-like
						PDB header: signaling protein Chain: A: PDB Molecule: sam pointed domain-containing ets

29	c2dkxA	Alignment	not modelled	13.2	13	transcription PDBTitle: solution structure of the sam_pnt-domain of ets2 transcription factor pdef (prostate ets)
30	d1wraa1	Alignment	not modelled	12.3	53	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Pce catalytic domain-like
31	c3lq6A	Alignment	not modelled	11.8	30	PDB header: viral protein Chain: A: PDB Molecule: capsid protein; PDBTitle: crystal structure of murine norovirus protruding (p) domain
32	d1f9aa	Alignment	not modelled	11.6	21	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Adenylyltransferase
33	d2aq0a1	Alignment	not modelled	10.9	14	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
34	c3oirA	Alignment	not modelled	10.9	14	PDB header: transport protein Chain: A: PDB Molecule: sulfate transporter sulfate transporter family protein; PDBTitle: crystal structure of sulfate transporter family protein from wolinetella2 succinogenes
35	c2h29A	Alignment	not modelled	10.8	30	PDB header: transferase Chain: A: PDB Molecule: probable nicotinate-nucleotide adenylyltransferase from staphylococcus aureus: product3 bound form 1
36	c3hhhA	Alignment	not modelled	10.7	38	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, padr family; PDBTitle: crystal structure of transcriptional regulator, a member of padr2 family, from enterococcus faecalis v583
37	d2dkfa1	Alignment	not modelled	10.4	32	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: beta-CASP RNA-metabolising hydrolases
38	c2f9jP	Alignment	not modelled	10.1	64	PDB header: rna binding protein Chain: P: PDB Molecule: splicing factor 3b subunit 1; PDBTitle: 3.0 angstrom resolution structure of a y22m mutant of the spliceosomal2 protein p14 bound to a region of sf3b155
39	d2cbia3	Alignment	not modelled	9.8	23	Fold: Zincin-like Superfamily: beta-N-acetylhexosaminidase-like domain Family: Hyaluronidase N-terminal domain-like
40	c2rmsB	Alignment	not modelled	9.8	35	PDB header: transcription Chain: B: PDB Molecule: msin3a-binding protein; PDBTitle: solution structure of the msin3a pah1-sap25 sid complex
41	c3ixxE	Alignment	not modelled	9.5	33	PDB header: virus Chain: E: PDB Molecule: peptide pr; PDBTitle: the pseudo-atomic structure of west nile immature virus in2 complex with fab fragments of the anti-fusion loop antibody3 e53
42	c3f8fA	Alignment	not modelled	9.5	25	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, padr-like family; PDBTitle: crystal structure of multidrug binding transcriptional regulator lmrr2 complexed with daunomycin
43	d2co5a1	Alignment	not modelled	9.2	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: F93-like
44	c2p7vA	Alignment	not modelled	9.1	23	PDB header: transcription Chain: A: PDB Molecule: regulator of sigma d; PDBTitle: crystal structure of the escherichia coli regulator of sigma 70, rsd,2 in complex with sigma 70 domain 4
45	c3hkzZ	Alignment	not modelled	9.1	33	PDB header: transferase Chain: Z: PDB Molecule: dna-directed rna polymerase subunit 13; PDBTitle: the x-ray crystal structure of rna polymerase from archaea
46	d1xzpa3	Alignment	not modelled	9.1	64	Fold: Folate-binding domain Superfamily: Folate-binding domain Family: TrmE formyl-THF-binding domain
47	c1xzqB	Alignment	not modelled	9.1	64	PDB header: hydrolase Chain: B: PDB Molecule: probable trna modification gtpase trme; PDBTitle: structure of the gtp-binding protein trme from thermotoga2 maritima complexed with 5-formyl-thf
48	d1hcra	Alignment	not modelled	8.7	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
49	d1ijwc	Alignment	not modelled	8.6	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
50	c3kzwD	Alignment	not modelled	8.6	62	PDB header: hydrolase Chain: D: PDB Molecule: cytosol aminopeptidase; PDBTitle: crystal structure of cytosol aminopeptidase from staphylococcus aureus2_col
51	d1uptb	Alignment	not modelled	8.6	35	Fold: GRIP domain Superfamily: GRIP domain Family: GRIP domain
52	d2i9wa3	Alignment	not modelled	8.5	55	Fold: Sec-C motif Superfamily: Sec-C motif Family: Sec-C motif
53	d1uptd	Alignment	not modelled	8.2	35	Fold: GRIP domain Superfamily: GRIP domain Family: GRIP domain
54	c3ut2B	Alignment	not modelled	8.1	15	PDB header: oxidoreductase Chain: B: PDB Molecule: catalase-peroxidase 2; PDBTitle: crystal structure of fungal magkatg2

55	c3tsjA_	Alignment	not modelled	8.0	18	PDB header: allergen, oxidoreductase Chain: A: PDB Molecule: pollen allergen phl p 4; PDBTitle: crystal structure of phl p 4, a grass pollen allergen with glucose2 dehydrogenase activity
56	d1mg7a1	Alignment	not modelled	7.9	60	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Early switch protein XOL-1, N-terminal domain
57	d3dssb1	Alignment	not modelled	7.9	19	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Protein prenyltransferases
58	c3c6rE_	Alignment	not modelled	7.7	42	PDB header: virus Chain: E: PDB Molecule: peptide pr; PDBTitle: low ph immature dengue virus
59	d1sv0a_	Alignment	not modelled	7.7	18	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: Pointed domain
60	c3lvtA_	Alignment	not modelled	7.7	27	PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase, family 38; PDBTitle: the crystal structure of a protein in the glycosyl hydrolase2 family 38 from enterococcus faecalis to 2.55a
61	c2wyhA_	Alignment	not modelled	7.7	33	PDB header: hydrolase Chain: A: PDB Molecule: alpha-mannosidase; PDBTitle: structure of the streptococcus pyogenes family gh38 alpha-2 mannosidase
62	c3peiA_	Alignment	not modelled	7.6	62	PDB header: hydrolase Chain: A: PDB Molecule: cytosol aminopeptidase; PDBTitle: crystal structure of cytosol aminopeptidase from francisella2 tularensis
63	c3c6eC_	Alignment	not modelled	7.6	42	PDB header: viral protein Chain: C: PDB Molecule: prm; PDBTitle: crystal structure of the precursor membrane protein-envelope protein2 heterodimer from the dengue 2 virus at neutral ph
64	c3ij3A_	Alignment	not modelled	7.6	54	PDB header: hydrolase Chain: A: PDB Molecule: cytosol aminopeptidase; PDBTitle: 1.8 angstrom resolution crystal structure of cytosol aminopeptidase2 from coxiella burnetii
65	c2e8pA_	Alignment	not modelled	7.4	22	PDB header: signaling protein Chain: A: PDB Molecule: elf3 protein; PDBTitle: solution structure of the n-terminal sam-domain of e74-like2 factor 3
66	c3bk2A_	Alignment	not modelled	7.3	22	PDB header: hydrolase Chain: A: PDB Molecule: metal dependent hydrolase; PDBTitle: crystal structure analysis of the rnase j/ump complex
67	d2c1ia2	Alignment	not modelled	7.3	18	Fold: Peptidoglycan deacetylase N-terminal noncatalytic region Superfamily: Peptidoglycan deacetylase N-terminal noncatalytic region Family: Peptidoglycan deacetylase N-terminal noncatalytic region
68	c3pqhB_	Alignment	not modelled	7.3	23	PDB header: viral protein Chain: B: PDB Molecule: gene product 138; PDBTitle: crystal structure of the c-terminal fragment of the bacteriophage2 phi92 membrane-piercing protein gp138
69	c4efdF_	Alignment	not modelled	7.3	54	PDB header: hydrolase Chain: F: PDB Molecule: aminopeptidase; PDBTitle: crystal structure of an m17 aminopeptidase from trypanosoma brucei,2 tb427tmp.02.4440
70	c3e37B_	Alignment	not modelled	7.2	18	PDB header: transferase Chain: B: PDB Molecule: protein farnesyltransferase subunit beta; PDBTitle: protein farnesyltransferase complexed with bisubstrate2 ethylenediamine scaffold inhibitor 5
71	c4b1oQ_	Alignment	not modelled	7.1	27	PDB header: transferase/dna Chain: Q: PDB Molecule: rna polymerase subunit 13; PDBTitle: archaeal rnap-dna binary complex at 4.32ang
72	c4esfA_	Alignment	not modelled	7.1	38	PDB header: transcription Chain: A: PDB Molecule: padr-like transcriptional regulator; PDBTitle: crystal structure of padr-like transcriptional regulator (bce3449)2 from bacillus cereus strain atcc 10987
73	c3h8gC_	Alignment	not modelled	7.1	62	PDB header: hydrolase Chain: C: PDB Molecule: cytosol aminopeptidase; PDBTitle: bestatin complex structure of leucine aminopeptidase from pseudomonas2 putida
74	d1mbxa_	Alignment	not modelled	7.1	100	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Scorpion toxin-like Family: Short-chain scorpion toxins
75	c3hkzY_	Alignment	not modelled	7.0	33	PDB header: transferase Chain: Y: PDB Molecule: dna-directed rna polymerase subunit 13; PDBTitle: the x-ray crystal structure of rna polymerase from archaea
76	d1xmaa_	Alignment	not modelled	6.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PadR-like
77	c1xmaA_	Alignment	not modelled	6.9	18	PDB header: transcription Chain: A: PDB Molecule: predicted transcriptional regulator; PDBTitle: structure of a transcriptional regulator from clostridium thermocellum2 cth-833
78	d1qwga_	Alignment	not modelled	6.9	28	Fold: TIM beta/alpha-barrel Superfamily: (2r)-phospho-3-sulfolactate synthase ComA Family: (2r)-phospho-3-sulfolactate synthase ComA
79	c4aclA_	Alignment	not modelled	6.8	12	PDB header: protein transport Chain: A: PDB Molecule: itssl; PDBTitle: 3d structure of dotu from francisella novicida
80	d1h2tc3	Alignment	not modelled	6.8	28	Fold: alpha-alpha superhelix Superfamily: ARM repeat Family: MIF4G domain-like
						Fold: Nucleotidyltransferase

81	d2o5aa1	Alignment	not modelled	6.8	26	Superfamily: Nucleotidyltransferase Family: IoJap/YbeB-like
82	c2waqQ	Alignment	not modelled	6.8	27	PDB header: transcription Chain: Q: PDB Molecule: dna-directed rna polymerase rpo13 subunit; PDBTitle: the complete structure of the archaeal 13-subunit dna-2 directed rna polymerase
83	c4esbA	Alignment	not modelled	6.7	27	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, padr family; PDBTitle: crystal structure of padr-like transcriptional regulator (bc4206) from2 bacillus cereus strain atcc 14579
84	d2nxya1	Alignment	not modelled	6.6	19	Fold: gp120 core Superfamily: gp120 core Family: gp120 core
85	c3ri2B	Alignment	not modelled	6.5	22	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, padr-like family; PDBTitle: crystal structure of padr family transcriptional regulator from2 eggerthella lenta dsm 2243
86	c3pcoD	Alignment	not modelled	6.5	29	PDB header: ligase Chain: D: PDB Molecule: phenylalanyl-trna synthetase, beta chain; PDBTitle: crystal structure of e. coli phenylalanine-trna synthetase complexed2 with phenylalanine and amp
87	c2qjxA	Alignment	not modelled	6.4	23	PDB header: protein binding Chain: A: PDB Molecule: protein bim1; PDBTitle: structural basis of microtubule plus end tracking by2 xmap215, clip-170 and eb1
88	c2kzhA	Alignment	not modelled	6.4	36	PDB header: isomerase Chain: A: PDB Molecule: tryptophan biosynthesis protein trpcf; PDBTitle: three-dimensional structure of a truncated phosphoribosylanthranilate2 isomerase (residues 255-384) from escherichia coli
89	c4abol	Alignment	not modelled	6.4	23	PDB header: structural protein Chain: I: PDB Molecule: microtubule integrity protein mal3; PDBTitle: mal3 ch domain homology model and mammalian tubulin (2xrp) docked2 into the 8.6-angstrom cryo-em map of mal3-gtppgamma-microtubules
90	c2p28A	Alignment	not modelled	6.4	43	PDB header: cell adhesion Chain: A: PDB Molecule: integrin beta-2; PDBTitle: structure of the phe2 and phe3 fragments of the integrin beta2 subunit
91	c2kvsA	Alignment	not modelled	6.4	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mw0776; PDBTitle: nmr solution structure of q7a1e8 protein from staphylococcus2 aureus: northeast structural genomics consortium target:3 zr215
92	d1hcfa	Alignment	not modelled	6.4	13	Fold: Cystine-knot cytokines Superfamily: Cystine-knot cytokines Family: Neurotrophin
93	c3kihC	Alignment	not modelled	6.4	29	PDB header: sugar binding protein Chain: C: PDB Molecule: 5-bladed -propeller lectin; PDBTitle: the crystal structures of two fragments truncated from 5-bladed -2 propeller lectin, tachylectin-2 (lib2-d2-15)
94	d1sxma	Alignment	not modelled	6.3	100	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Scorpion toxin-like Family: Short-chain scorpion toxins
95	c3qq5A	Alignment	not modelled	6.2	60	PDB header: oxidoreductase Chain: A: PDB Molecule: small gtp-binding protein; PDBTitle: crystal structure of the [fefe]-hydrogenase maturati on protein hydF
96	d1ok8a1	Alignment	not modelled	6.2	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
97	c4arpB	Alignment	not modelled	6.1	35	PDB header: hydrolase Chain: B: PDB Molecule: pesticin; PDBTitle: structure of the inactive pesticin e178a mutant
98	c2hc9A	Alignment	not modelled	6.1	69	PDB header: hydrolase Chain: A: PDB Molecule: leucine aminopeptidase 1; PDBTitle: structure of caenorhabditis elegans leucine aminopeptidase-zinc2 complex (lap1)
99	d1pjwa	Alignment	not modelled	6.0	31	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain