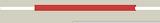
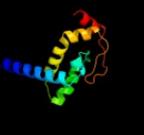
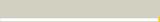
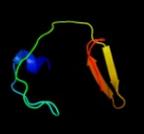
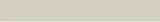
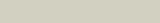
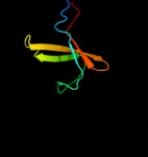
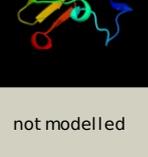


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P45577
Date	Thu Jan 5 12:03:23 GMT 2012
Unique Job ID	d9e5a56f962040e2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1dvoa_	 Alignment		100.0	26	Fold: FinO-like Superfamily: FinO-like Family: FinO-like
2	d2hxja1	 Alignment		100.0	21	Fold: FinO-like Superfamily: FinO-like Family: FinO-like
3	c2hxjF_	 Alignment		100.0	21	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a protein of unknown function nmb1681 from2 neisseria meningitidis mc58, possible nucleic acid binding protein
4	c2e70A_	 Alignment		91.3	26	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt5; PDBTitle: solution structure of the fifth kow motif of human2 transcription elongation factor spt5
5	c3qiiA_	 Alignment		88.1	20	PDB header: transcription regulator Chain: A: PDB Molecule: phd finger protein 20; PDBTitle: crystal structure of tudor domain 2 of human phd finger protein 20
6	c3p8dB_	 Alignment		82.0	21	PDB header: protein binding Chain: B: PDB Molecule: medulloblastoma antigen mu-mb-50.72; PDBTitle: crystal structure of the second tudor domain of human phf20 (homodimer2 form)
7	c2in0A_	 Alignment		74.3	20	PDB header: hydrolase Chain: A: PDB Molecule: endonuclease pi-mtui; PDBTitle: crystal structure of mtu reca intein splicing domain
8	c2k8iA_	 Alignment		72.4	20	PDB header: isomerase Chain: A: PDB Molecule: peptidyl-prolyl cis-trans isomerase; PDBTitle: solution structure of e.coli slyd
9	c2equA_	 Alignment		70.9	20	PDB header: protein binding Chain: A: PDB Molecule: phd finger protein 20-like 1; PDBTitle: solution structure of the tudor domain of phd finger2 protein 20-like 1
10	c2qqsB_	 Alignment		67.8	13	PDB header: oxidoreductase Chain: B: PDB Molecule: jmjc domain-containing histone demethylation PDBTitle: jmjd2a tandem tudor domains in complex with a trimethylated2 histone h4-k20 peptide
11	d1nxza1	 Alignment		66.8	31	Fold: PUA domain-like Superfamily: PUA domain-like Family: Yggj N-terminal domain-like

12	c1zd7B	Alignment		61.7	11	PDB header: transferase Chain: B: PDB Molecule: dna polymerase iii alpha subunit; PDBTitle: 1.7 angstrom crystal structure of post-splicing form of a dnae intein2 from synechocystis sp. pcc 6803
13	c3dlmA	Alignment		61.4	21	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase setdb1; PDBTitle: crystal structure of tudor domain of human histone-lysine n-2 methyltransferase setdb1
14	d2ix0a3	Alignment		60.8	32	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
15	d1kk1a2	Alignment		59.6	19	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain Family: EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain
16	c2kfwA	Alignment		58.9	14	PDB header: isomerase Chain: A: PDB Molecule: fkbp-type peptidyl-prolyl cis-trans isomerase PDBTitle: solution structure of full-length slyd from e.coli
17	c3d0fA	Alignment		57.8	22	PDB header: transferase Chain: A: PDB Molecule: penicillin-binding 1 transmembrane protein mrca; PDBTitle: structure of the big_1156.2 domain of putative penicillin-binding2 protein mrca from nitrosomonas europaea atcc 19718
18	d1s0ua2	Alignment		56.4	20	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain Family: EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain
19	d2qn6a2	Alignment		55.8	21	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain Family: EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain
20	d3bzka4	Alignment		55.0	24	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
21	d1sroa	Alignment	not modelled	54.9	21	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
22	c2xdpA	Alignment	not modelled	51.1	13	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific demethylase 4c; PDBTitle: crystal structure of the tudor domain of human jmj2c
23	d1at0a	Alignment	not modelled	48.5	18	Fold: Hedgehog/intein (Hint) domain Superfamily: Hedgehog/intein (Hint) domain Family: Hedgehog C-terminal (Hog) autoprocessing domain
24	c2k52A	Alignment	not modelled	47.3	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mj1198; PDBTitle: structure of uncharacterized protein mj1198 from2 methanocaldococcus jannaschii. northeast structural3 genomics target mjr117b
25	d1kl9a2	Alignment	not modelled	44.0	26	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
26	d2do3a1	Alignment	not modelled	43.2	22	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: SPT5 KOW domain-like
27	d1ib8a1	Alignment	not modelled	40.9	24	Fold: Sm-like fold Superfamily: YhbC-like, C-terminal domain Family: YhbC-like, C-terminal domain
28	d1biaa2	Alignment	not modelled	38.6	15	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: Biotin repressor (BirA)
						PDB header: transcription

29	c2kvqG	Alignment	not modelled	36.9	18	Chain: G: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of nuse:nusg-ctd complex
30	c2jvvA	Alignment	not modelled	36.9	18	PDB header: transcription Chain: A: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of e. coli nusg carboxyterminal domain
31	d1vqq1	Alignment	not modelled	36.7	29	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: Ribosomal proteins L24p and L21e
32	d1kk8a1	Alignment	not modelled	35.7	13	Fold: SH3-like barrel Superfamily: Myosin S1 fragment, N-terminal domain Family: Myosin S1 fragment, N-terminal domain
33	d1whma	Alignment	not modelled	33.5	26	Fold: SH3-like barrel Superfamily: Cap-Gly domain Family: Cap-Gly domain
34	c2khiA	Alignment	not modelled	32.8	20	PDB header: ribosomal protein Chain: A: PDB Molecule: 30s ribosomal protein s1; PDBTitle: nmr structure of the domain 4 of the e. coli ribosomal2 protein s1
35	c2keqA	Alignment	not modelled	31.8	9	PDB header: splicing Chain: A: PDB Molecule: dna polymerase iii alpha subunit, nucleic acid PDBTitle: solution structure of dnae intein from nostoc punctiforme
36	c2khjA	Alignment	not modelled	31.8	24	PDB header: ribosomal protein Chain: A: PDB Molecule: 30s ribosomal protein s1; PDBTitle: nmr structure of the domain 6 of the e. coli ribosomal2 protein s1
37	c3p8bB	Alignment	not modelled	30.0	25	PDB header: transferase/transcription Chain: B: PDB Molecule: transcription antitermination protein nusg; PDBTitle: x-ray crystal structure of pyrococcus furiosus transcription2 elongation factor spt4/5
38	d1nppa2	Alignment	not modelled	29.5	21	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: N-utilization substance G protein NusG, C-terminal domain
39	c2ix1A	Alignment	not modelled	28.4	33	PDB header: hydrolase Chain: A: PDB Molecule: exoribonuclease 2; PDBTitle: rnase ii d209n mutant
40	c2hbpA	Alignment	not modelled	28.3	24	PDB header: endocytosis, protein binding Chain: A: PDB Molecule: cytoskeleton assembly control protein sla1; PDBTitle: solution structure of sla1 homology domain 1
41	c3q9qB	Alignment	not modelled	26.6	19	PDB header: chaperone Chain: B: PDB Molecule: heat shock protein beta-1; PDBTitle: hspb1 fragment second crystal form
42	d1wgka	Alignment	not modelled	26.6	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: C9orf74 homolog
43	c1ssfA	Alignment	not modelled	26.4	9	PDB header: cell cycle Chain: A: PDB Molecule: transformation related protein 53 binding PDBTitle: solution structure of the mouse 53bp1 fragment (residues2 1463-1617)
44	c1zeqX	Alignment	not modelled	25.9	17	PDB header: metal binding protein Chain: X: PDB Molecule: cation efflux system protein cusf; PDBTitle: 1.5 a structure of apo-cusf residues 6-88 from escherichia2 coli
45	c2egwB	Alignment	not modelled	25.5	9	PDB header: rna methyltransferase Chain: B: PDB Molecule: upf0088 protein aq_165; PDBTitle: crystal structure of rrna methyltransferase with sah ligand
46	c2ckkA	Alignment	not modelled	25.1	16	PDB header: nuclear protein Chain: A: PDB Molecule: kin17; PDBTitle: high resolution crystal structure of the human kin172 c-terminal domain containing a kow motif3 kin17.
47	c2cghB	Alignment	not modelled	24.9	12	PDB header: ligase Chain: B: PDB Molecule: biotin ligase; PDBTitle: crystal structure of biotin ligase from mycobacterium2 tuberculosis
48	c1vhkA	Alignment	not modelled	24.9	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein yqeu; PDBTitle: crystal structure of an hypothetical protein
49	c2imzA	Alignment	not modelled	23.9	18	PDB header: hydrolase Chain: A: PDB Molecule: endonuclease pi-mtui; PDBTitle: crystal structure of mtu reca intein splicing domain
50	d1nz9a	Alignment	not modelled	23.4	29	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: N-utilization substance G protein NusG, C-terminal domain
51	c2eayB	Alignment	not modelled	23.0	21	PDB header: ligase Chain: B: PDB Molecule: biotin [acetyl-coa-carboxylase] ligase; PDBTitle: crystal structure of biotin protein ligase from aquifex2 aeolicus
52	d1mi8a	Alignment	not modelled	23.0	16	Fold: Hedgehog/intein (Hint) domain Superfamily: Hedgehog/intein (Hint) domain Family: Intein (protein splicing domain)
53	c1kl9A	Alignment	not modelled	21.3	26	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor 2 subunit 1; PDBTitle: crystal structure of the n-terminal segment of human eukaryotic2 initiation factor 2alpha
54	d2ba0a1	Alignment	not modelled	20.9	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like PDB header: transferase

55	c3kw2A_	Alignment	not modelled	20.8	18	Chain: A: PDB Molecule: probable r-rna methyltransferase; PDBTitle: crystal structure of probable rrna-methyltransferase from2 porphyromonas gingivalis
56	c1ywuA_	Alignment	not modelled	20.3	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pa4608; PDBTitle: solution nmr structure of pseudomonas aeruginosa protein pa4608.2 northeast structural genomics target pat7
57	d1ywua1	Alignment	not modelled	20.3	9	Fold: Split barrel-like Superfamily: PilZ domain-like Family: PilZ domain
58	d2rdea1	Alignment	not modelled	20.1	17	Fold: Split barrel-like Superfamily: PilZ domain-like Family: PilZ domain
59	d2z0sa1	Alignment	not modelled	20.0	10	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
60	c2wj7D_	Alignment	not modelled	19.8	14	PDB header: chaperone Chain: D: PDB Molecule: alpha-crystallin b chain; PDBTitle: human alphab crystallin
61	d2i5ua1	Alignment	not modelled	19.8	10	Fold: DnaD domain-like Superfamily: DnaD domain-like Family: DnaD domain
62	c2kr7A_	Alignment	not modelled	19.8	16	PDB header: isomerase Chain: A: PDB Molecule: fkbp-type peptidyl-prolyl cis-trans isomerase slyd; PDBTitle: solution structure of helicobacter pylori slyd
63	d1vhka1	Alignment	not modelled	19.6	13	Fold: PUA domain-like Superfamily: PUA domain-like Family: Yggj N-terminal domain-like
64	d1q46a2	Alignment	not modelled	18.9	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
65	d1alla_	Alignment	not modelled	18.8	26	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
66	d2je6i1	Alignment	not modelled	18.3	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
67	c2d7gD_	Alignment	not modelled	18.1	15	PDB header: hydrolase Chain: D: PDB Molecule: primosomal protein n; PDBTitle: crystal structure of the aa complex of the n-terminal2 domain of pria
68	c211tA_	Alignment	not modelled	17.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of the n-terminal domain of np_954075.1
69	c2ej9A_	Alignment	not modelled	17.6	21	PDB header: ligase Chain: A: PDB Molecule: putative biotin ligase; PDBTitle: crystal structure of biotin protein ligase from2 methanococcus jannaschii
70	c2ewnA_	Alignment	not modelled	17.5	14	PDB header: ligase, transcription Chain: A: PDB Molecule: bira bifunctional protein; PDBTitle: ecoli biotin repressor with co-repressor analog
71	c2kq6A_	Alignment	not modelled	17.2	26	PDB header: transport protein Chain: A: PDB Molecule: polycystin-2; PDBTitle: the structure of the ef-hand domain of polycystin-2 suggests a2 mechanism for ca2+-dependent regulation of polycystin-2 channel3 activity
72	d2nn6h1	Alignment	not modelled	16.2	19	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
73	d1go3e1	Alignment	not modelled	16.1	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
74	c1xni1_	Alignment	not modelled	15.8	13	PDB header: cell cycle Chain: I: PDB Molecule: tumor suppressor p53-binding protein 1; PDBTitle: tandem tudor domain of 53bp1
75	c2zrrA_	Alignment	not modelled	15.3	25	PDB header: antimicrobial protein Chain: A: PDB Molecule: mundticiin ks immunity protein; PDBTitle: crystal structure of an immunity protein that contributes2 to the self-protection of bacteriocin-producing3 enterococcus mundtii 15-1a
76	d1ixda_	Alignment	not modelled	15.0	21	Fold: SH3-like barrel Superfamily: Cap-Gly domain Family: Cap-Gly domain
77	c1i84V_	Alignment	not modelled	14.9	23	PDB header: contractile protein Chain: V: PDB Molecule: smooth muscle myosin heavy chain; PDBTitle: cryo-em structure of the heavy meromyosin subfragment of2 chicken gizzard smooth muscle myosin with regulatory light3 chain in the dephosphorylated state. only c alphas4 provided for regulatory light chain. only backbone atoms5 provided for s2 fragment.
78	d1b33a_	Alignment	not modelled	14.8	22	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
79	c2jkuA_	Alignment	not modelled	14.6	18	PDB header: ligase Chain: A: PDB Molecule: propionyl-coa carboxylase alpha chain, PDBTitle: crystal structure of the n-terminal region of the biotin2 acceptor domain of human propionyl-coa carboxylase
80	c3a8jF_	Alignment	not modelled	14.6	0	PDB header: transferase/transport protein Chain: F: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of et-ehred complex

81	c3mxuA_	Alignment	not modelled	14.5	31	PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from bartonella2 henselae
82	c3iftA_	Alignment	not modelled	14.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from2 mycobacterium tuberculosis, using x-rays from the compact light3 source.
83	d1cpcb_	Alignment	not modelled	13.8	22	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
84	c3cgnA_	Alignment	not modelled	13.6	22	PDB header: isomerase Chain: A: PDB Molecule: peptidyl-prolyl cis-trans isomerase; PDBTitle: crystal structure of thermophilic slyd
85	d1br2a1	Alignment	not modelled	13.3	25	Fold: SH3-like barrel Superfamily: Myosin S1 fragment, N-terminal domain Family: Myosin S1 fragment, N-terminal domain
86	d2ghra1	Alignment	not modelled	13.2	42	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: HTS-like
87	c1v1hB_	Alignment	not modelled	13.0	19	PDB header: adenovirus Chain: B: PDB Molecule: fibrin, fiber protein; PDBTitle: adenovirus fibre shaft sequence n-terminally fused to the2 bacteriophage t4 fibrin foldon trimerisation motif with3 a short linker
88	d1gmea_	Alignment	not modelled	12.8	32	Fold: HSP20-like chaperones Superfamily: HSP20-like chaperones Family: HSP20
89	d1kn1a_	Alignment	not modelled	12.4	26	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
90	c2qj1A_	Alignment	not modelled	12.2	16	PDB header: signaling protein Chain: A: PDB Molecule: ubiquitin-related modifier 1; PDBTitle: crystal structure of urm1
91	c2zkrq_	Alignment	not modelled	12.0	21	PDB header: ribosomal protein/rna Chain: Q: PDB Molecule: rna expansion segment es31 part ii; PDBTitle: structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
92	c3aabA_	Alignment	not modelled	11.9	23	PDB header: chaperone Chain: A: PDB Molecule: putative uncharacterized protein st1653; PDBTitle: small heat shock protein hsp14.0 with the mutations of i120f and i122f2 in the form i crystal
93	c1br4E_	Alignment	not modelled	11.8	23	PDB header: muscle protein Chain: E: PDB Molecule: myosin; PDBTitle: smooth muscle myosin motor domain-essential light chain2 complex with mgadp.bef3 bound at the active site
94	d1hpca_	Alignment	not modelled	11.7	15	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
95	d1xo3a_	Alignment	not modelled	11.6	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: C9orf74 homolog
96	c1vdeA_	Alignment	not modelled	11.3	20	PDB header: endonuclease Chain: A: PDB Molecule: pi-scei; PDBTitle: pi-scei, a homing endonuclease with protein splicing2 activity
97	c1vftA_	Alignment	not modelled	11.1	31	PDB header: isomerase Chain: A: PDB Molecule: alanine racemase; PDBTitle: crystal structure of l-cycloserine-bound form of alanine2 racemase from d-cycloserine-producing streptomyces3 lavendulae
98	d1dq3a1	Alignment	not modelled	11.0	11	Fold: Hedgehog/intein (Hint) domain Superfamily: Hedgehog/intein (Hint) domain Family: Intein (protein splicing domain)
99	d2h50a1	Alignment	not modelled	10.8	32	Fold: HSP20-like chaperones Superfamily: HSP20-like chaperones Family: HSP20