

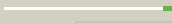


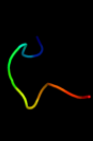





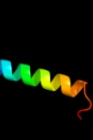



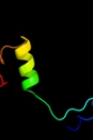



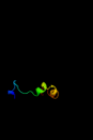









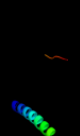



Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	A0AUZ9
Date	Sat Jun 16 10:19:00 BST 2012
Unique Job ID	438542787989b764

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2y0mB_	 Alignment		89.8	43	PDB header: transcription Chain: B; PDB Molecule: male-specific lethal 1 homolog; PDBTitle: crystal structure of the complex between dosage2 compensation factors msl1 and mof
2	c2wb6A_	 Alignment		53.5	70	PDB header: viral protein Chain: A; PDB Molecule: afv1-102; PDBTitle: crystal structure of afv1-102, a protein from the acidianus2 filamentous virus 1
3	d2gykb1	 Alignment		52.7	42	Fold: His-Me finger endonucleases Superfamily: His-Me finger endonucleases Family: HNH-motif
4	c7ceiB_	 Alignment		50.7	42	PDB header: immune system Chain: B; PDB Molecule: protein (colicin e7 immunity protein); PDBTitle: the endonuclease domain of colicin e7 in complex with its inhibitor2 im7 protein
5	d2jb0b1	 Alignment		47.5	50	Fold: His-Me finger endonucleases Superfamily: His-Me finger endonucleases Family: HNH-motif
6	d1r6ta1	 Alignment		41.0	17	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: a tRNA synthase domain
7	d1tafb_	 Alignment		39.7	18	Fold: Histone-fold Superfamily: Histone-fold Family: TBP-associated factors, TAFs
8	c1zauA_	 Alignment		34.9	32	PDB header: ligase Chain: A; PDB Molecule: dna ligase; PDBTitle: adenylation domain of nad+ dependent dna ligase from2 m.tuberculosis
9	d1v9pa3	 Alignment		33.4	29	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: Adenylation domain of NAD+-dependent DNA ligase
10	d1b04a_	 Alignment		30.6	40	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: Adenylation domain of NAD+-dependent DNA ligase
11	c3thfA_	 Alignment		29.6	18	PDB header: actin-binding protein/protein binding Chain: A; PDB Molecule: protein shroom; PDBTitle: crystal structure of the sd2 domain from drosophila shroom

12	c3bacA	Alignment		27.1	39	PDB header: ligase Chain: A: PDB Molecule: dna ligase; PDBTitle: structural basis for the inhibition of bacterial nad+2 dependent dna ligase
13	d1dgsa3	Alignment		25.4	29	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: Adenylation domain of NAD+-dependent DNA ligase
14	d1ta8a	Alignment		24.8	42	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: Adenylation domain of NAD+-dependent DNA ligase
15	c2l5bA	Alignment		22.6	55	PDB header: apoptosis Chain: A: PDB Molecule: activator of apoptosis harakiri; PDBTitle: solution structure of the transmembrane domain of bcl-2 member2 harakiri in micelles
16	c1dgsB	Alignment		20.2	29	PDB header: ligase Chain: B: PDB Molecule: dna ligase; PDBTitle: crystal structure of nad+-dependent dna ligase from t.2 filiformis
17	c3m6wA	Alignment		19.2	24	PDB header: transferase Chain: A: PDB Molecule: rrna methylase; PDBTitle: multi-site-specific 16s rrna methyltransferase rsmf from thermus2 thermophilus in space group p21212 in complex with s-adenosyl-l-3 methionine
18	c3v62F	Alignment		18.6	41	PDB header: protein binding/dna binding protein Chain: F: PDB Molecule: atp-dependent dna helicase srs2; PDBTitle: structure of the s. cerevisiae srs2 c-terminal domain in complex with2 pcna conjugated to sumo on lysine 164
19	c1dipA	Alignment		18.3	19	PDB header: acetylation Chain: A: PDB Molecule: delta-sleep-inducing peptide immunoreactive PDBTitle: the solution structure of porcine delta-sleep-inducing2 peptide immunoreactive peptide, nmr, 10 structures
20	c2fgtA	Alignment		16.3	56	PDB header: signaling protein Chain: A: PDB Molecule: two-component system yycf/yycg regulatory PDBTitle: crystal structure of yych from bacillus subtilis
21	d1fyja	Alignment	not modelled	16.1	22	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: a tRNA synthase domain
22	c1mv4B	Alignment	not modelled	15.9	36	PDB header: de novo protein Chain: B: PDB Molecule: tropomyosin 1 alpha chain; PDBTitle: tm9a251-284: a peptide model of the c-terminus of a rat2 striated alpha tropomyosin
23	c3eb8A	Alignment	not modelled	15.8	78	PDB header: hydrolase Chain: A: PDB Molecule: cysteine protease-like vira; PDBTitle: vira
24	d1lg7a	Alignment	not modelled	15.6	20	Fold: VSV matrix protein Superfamily: VSV matrix protein Family: VSV matrix protein
25	c3ee1A	Alignment	not modelled	15.3	78	PDB header: hydrolase Chain: A: PDB Molecule: effector protein vira; PDBTitle: novel fold of vira, a type iii secretion system effector protein from2 shigella flexneri
26	c3m4xA	Alignment	not modelled	13.3	24	PDB header: transferase Chain: A: PDB Molecule: nol1/nop2/sun family protein; PDBTitle: structure of a ribosomal methyltransferase
27	c3tweA	Alignment	not modelled	13.3	31	PDB header: unknown function Chain: A: PDB Molecule: alpha4h; PDBTitle: crystal structure of the de novo designed peptide alpha4h
28	c2l1qA	Alignment	not modelled	13.0	36	PDB header: antimicrobial protein Chain: A: PDB Molecule: liver-expressed antimicrobial peptide 2; PDBTitle: solution structure of human liver expressed antimicrobial peptide 2
						PDB header: unknown function

29	c3tweB_	Alignment	not modelled	12.9	31	Chain: B: PDB Molecule: alpha4h; PDBTitle: crystal structure of the de novo designed peptide alpha4h
30	d1mzga_	Alignment	not modelled	12.9	19	Fold: SufE/NifU Superfamily: SufE/NifU Family: SufE-like
31	d1csca_	Alignment	not modelled	12.3	19	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
32	c2qrlA_	Alignment	not modelled	12.2	18	PDB header: oxidoreductase Chain: A: PDB Molecule: saccharopine dehydrogenase, nad+, l-lysine- PDBTitle: crystal structure of oxalylglycine-bound saccharopine2 dehydrogenase (l-lys forming) from saccharomyces cerevisiae
33	d1fx7a3	Alignment	not modelled	11.7	28	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
34	d1fzva_	Alignment	not modelled	10.6	36	Fold: UBC-like Superfamily: UBC-like Family: UBC-related
35	d2ob5a1	Alignment	not modelled	10.6	13	Fold: RbsD-like Superfamily: RbsD-like Family: RbsD-like
36	c2yg8B_	Alignment	not modelled	10.4	19	PDB header: hydrolase Chain: B: PDB Molecule: dna-3-methyladenine glycosidase ii, putative; PDBTitle: structure of an unusual 3-methyladenine dna glycosylase ii (2 alka) from deinococcus radiodurans
37	c1nh1A_	Alignment	not modelled	10.2	13	PDB header: avirulence protein Chain: A: PDB Molecule: avirulence b protein; PDBTitle: crystal structure of the type iii effector avrb from2 pseudomonas syringae.
38	d1nh1a_	Alignment	not modelled	10.2	13	Fold: Antivirulence factor Superfamily: Antivirulence factor Family: Antivirulence factor
39	c1zg2A_	Alignment	not modelled	10.1	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical upf0213 protein bh0048; PDBTitle: solution nmr structure of the upf0213 protein bh0048 from2 bacillus halodurans. northeast structural genomics target3 bhr2.
40	c2djvA_	Alignment	not modelled	9.9	27	PDB header: protein binding Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: solution structures of the whep-trs domain of human2 methionyl-trna synthetase
41	d2f76x1	Alignment	not modelled	9.3	27	Fold: Retroviral matrix proteins Superfamily: Retroviral matrix proteins Family: Mason-Pfizer monkey virus matrix protein
42	d1d2da_	Alignment	not modelled	9.3	24	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: a tRNA synthase domain
43	c3bvhe_	Alignment	not modelled	9.2	21	PDB header: blood clotting Chain: E: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of recombinant gammad364a fibrinogen fragment d with2 the peptide ligand gly-pro-arg-pro-amide
44	c2hinA_	Alignment	not modelled	9.1	50	PDB header: transcription Chain: A: PDB Molecule: repressor protein; PDBTitle: structure of n15 cro at 1.05 a: an ortholog of lambda cro2 with a completely different but equally effective3 dimerization mechanism
45	c2frxD_	Alignment	not modelled	9.0	14	PDB header: transferase Chain: D: PDB Molecule: hypothetical protein yebu; PDBTitle: crystal structure of yebu, a m5c rna methyltransferase from e.coli
46	d1n7va_	Alignment	not modelled	8.8	29	Fold: Adsorption protein p2 Superfamily: Adsorption protein p2 Family: Adsorption protein p2
47	d1v1oa2	Alignment	not modelled	8.6	36	Fold: beta-Grasp (ubiquitin-like) Superfamily: Superantigen toxins, C-terminal domain Family: Superantigen toxins, C-terminal domain
48	c3dxeB_	Alignment	not modelled	8.5	48	PDB header: protein binding Chain: B: PDB Molecule: amyloid beta a4 protein; PDBTitle: crystal structure of the intracellular domain of human app2 (t668a mutant) in complex with fe65-ptb2
49	c3fg9B_	Alignment	not modelled	8.3	45	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein of universal stress protein uspa family; PDBTitle: the crystal structure of an universal stress protein uspa2 family protein from lactobacillus plantarum wcfs1
50	c2cxiA_	Alignment	not modelled	8.3	26	PDB header: ligase Chain: A: PDB Molecule: phenylalanyl-trna synthetase beta chain; PDBTitle: crystal structure of an n-terminal fragment of the phenylalanyl-trna2 synthetase beta-subunit from pyrococcus horikoshii
51	d1luuja_	Alignment	not modelled	8.3	29	Fold: Lissencephaly-1 protein (Lis-1, PAF-AH alpha) N-terminal domain Superfamily: Lissencephaly-1 protein (Lis-1, PAF-AH alpha) N-terminal domain Family: Lissencephaly-1 protein (Lis-1, PAF-AH alpha) N-terminal domain
52	d1mwpa_	Alignment	not modelled	8.1	33	Fold: SRCR-like Superfamily: A heparin-binding domain Family: A heparin-binding domain
53	c1nh2C_	Alignment	not modelled	8.1	33	PDB header: transcription/dna Chain: C: PDB Molecule: transcription initiation factor iia large chain;

						PDBTitle: crystal structure of a yeast tfIIa/tp/dna complex
54	d1nh2c_	Alignment	not modelled	8.1	33	Fold: Transcription factor IIA (TFIIA), beta-barrel domain Superfamily: Transcription factor IIA (TFIIA), beta-barrel domain Family: Transcription factor IIA (TFIIA), beta-barrel domain
55	c3jlsA_	Alignment	not modelled	8.0	14	PDB header: ligase Chain: A: PDB Molecule: dna ligase; PDBTitle: crystal structure of the adenylation domain of nad+-2 dependent dna ligase from staphylococcus aureus
56	c2x9oA_	Alignment	not modelled	7.8	25	PDB header: oxidoreductase Chain: A: PDB Molecule: 15,16- dihydrobiliverdin-ferredoxin oxidoreductase; PDBTitle: structure of 15, 16- dihydrobiliverdin:ferredoxin2 oxidoreductase (peba)
57	c2g18K_	Alignment	not modelled	7.6	5	PDB header: oxidoreductase Chain: K: PDB Molecule: phycocyanobilin:ferredoxin oxidoreductase; PDBTitle: crystal structure of nostoc sp. 7120 phycocyanobilin:ferredoxin2 oxidoreductase (pcya) apoprotein
58	c3ktmB_	Alignment	not modelled	7.6	33	PDB header: cell adhesion, signaling protein Chain: B: PDB Molecule: amyloid beta a4 protein; PDBTitle: structure of the heparin-induced e1-dimer of the amyloid precursor2 protein (app)
59	c3ec8A_	Alignment	not modelled	7.1	42	PDB header: cell adhesion Chain: A: PDB Molecule: putative uncharacterized protein flj10324; PDBTitle: the crystal structure of the ra domain of flj10324 (radiI)
60	c2w2rA_	Alignment	not modelled	7.0	14	PDB header: viral protein Chain: A: PDB Molecule: matrix protein; PDBTitle: structure of the vesicular stomatitis virus matrix protein
61	c2jvhA_	Alignment	not modelled	7.0	19	PDB header: immune system Chain: A: PDB Molecule: igg-binding protein sbi; PDBTitle: structure of c3-binding domain 4 of s. aureus protein sbi
62	c2z5hB_	Alignment	not modelled	6.9	33	PDB header: contractile protein Chain: B: PDB Molecule: general control protein gcn4 and tropomyosin PDBTitle: crystal structure of the head-to-tail junction of2 tropomyosin complexed with a fragment of tnt
63	d2z8la2	Alignment	not modelled	6.6	27	Fold: beta-Grasp (ubiquitin-like) Superfamily: Superantigen toxins, C-terminal domain Family: Superantigen toxins, C-terminal domain
64	c2ao9H_	Alignment	not modelled	6.6	16	PDB header: structural genomics, unknown function Chain: H: PDB Molecule: phage protein; PDBTitle: structural genomics, the crystal structure of a phage protein2 (phbc6a51) from bacillus cereus atcc 14579
65	c3d5jB_	Alignment	not modelled	6.6	26	PDB header: oxidoreductase Chain: B: PDB Molecule: glutaredoxin-2, mitochondrial; PDBTitle: structure of yeast grx2-c30s mutant with glutathionyl mixed disulfide
66	c3h0gA_	Alignment	not modelled	6.6	39	PDB header: transcription Chain: A: PDB Molecule: dna-directed rna polymerase ii subunit rpb1; PDBTitle: rna polymerase ii from schizosaccharomyces pombe
67	c3f2rA_	Alignment	not modelled	6.3	28	PDB header: transferase Chain: A: PDB Molecule: choline kinase alpha; PDBTitle: crystal structure of human choline kinase alpha in complex2 with hemicholinium-3
68	d2hrkb1	Alignment	not modelled	6.3	16	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Arc1p N-terminal domain-like
69	c2wjvE_	Alignment	not modelled	6.3	40	PDB header: hydrolase Chain: E: PDB Molecule: regulator of nonsense transcripts 2; PDBTitle: crystal structure of the complex between human nonsense2 mediated decay factors upf1 and upf2
70	c2v1lA_	Alignment	not modelled	6.2	57	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: structure of the conserved hypothetical protein vc1805 from2 pathogenicity island vpi-2 of vibrio cholerae o1 biovar3 eltor str. n16961 shares structural homology with the4 human p32 protein
71	c2wcuB_	Alignment	not modelled	6.1	15	PDB header: isomerase Chain: B: PDB Molecule: protein fucu homolog; PDBTitle: crystal structure of mammalian fucu
72	c3cuxA_	Alignment	not modelled	6.0	43	PDB header: transferase Chain: A: PDB Molecule: malate synthase; PDBTitle: atomic resolution structures of escherichia coli and2 bacillus anthracis malate synthase a: comparison with3 isoform g and implications for structure based drug design
73	c1ywlA_	Alignment	not modelled	6.0	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical upf0213 protein ef2693; PDBTitle: solution nmr structure of the protein ef2693 from e.2 faecalis: northeast structural genomics consortium target3 efr36
74	d1eg3a1	Alignment	not modelled	6.0	38	Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
75	c3lx6B_	Alignment	not modelled	6.0	20	PDB header: transferase Chain: B: PDB Molecule: cytosine-specific methyltransferase; PDBTitle: crystal structure of putative dna cytosine methylase from shigella2 flexneri 2a str. 2457t
76	c3iydD_	Alignment	not modelled	5.9	14	PDB header: transcription/dna Chain: D: PDB Molecule: dna-directed rna polymerase subunit beta; PDBTitle: three-dimensional em structure of an intact activator-dependent2 transcription initiation complex
77	c2q6qB_	Alignment	not modelled	5.9	67	PDB header: cell cycle Chain: B: PDB Molecule: spindle pole body component spc42; PDBTitle: crystal structure of spc42p, a critical component of spindle pole body2 in budding yeast
						Fold: Immunoglobulin-like beta-sandwich

78	d1axib1	Alignment	not modelled	5.8	43	Superfamily: Fibronectin type III Family: Fibronectin type III
79	d1nhpa3	Alignment	not modelled	5.8	15	Fold: CO dehydrogenase flavoprotein C-domain-like Superfamily: FAD/NAD-linked reductases, dimerisation (C-terminal) domain Family: FAD/NAD-linked reductases, dimerisation (C-terminal) domain
80	c2l1uA	Alignment	not modelled	5.8	12	PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase b2, mitochondrial; PDBTitle: structure-functional analysis of mammalian msrb2 protein
81	c2w56B	Alignment	not modelled	5.7	43	PDB header: unknown function Chain: B: PDB Molecule: vc0508; PDBTitle: structure of the hypothetical protein vc0508 from vibrio cholerae2 vsp-ii pathogenicity island
82	c2f9jP	Alignment	not modelled	5.7	36	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
83	c2k58B	Alignment	not modelled	5.7	26	PDB header: transport protein Chain: B: PDB Molecule: neuronal acetylcholine receptor subunit beta-2; PDBTitle: nmr structures of the first transmembrane domain of the2 neuronal acetylcholine receptor beta 2 subunit
84	d1eita	Alignment	not modelled	5.7	100	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: omega toxin-like Family: Spider toxins
85	d2qdyb1	Alignment	not modelled	5.7	25	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Nitrile hydratase beta chain
86	c1z9vA	Alignment	not modelled	5.5	30	PDB header: unknown function Chain: A: PDB Molecule: conserved hypothetical protein mth0776; PDBTitle: solution structure of mth0776 from methanobacterium2 thermoautotrophicum (strain h)
87	c3ax1A	Alignment	not modelled	5.5	9	PDB header: protein binding Chain: A: PDB Molecule: serrate rna effector molecule; PDBTitle: molecular insights into mirna processing by arabidopsis serrate
88	d1yh2a1	Alignment	not modelled	5.5	36	Fold: UBC-like Superfamily: UBC-like Family: UBC-related
89	c1x4qA	Alignment	not modelled	5.4	43	PDB header: rna binding protein Chain: A: PDB Molecule: u4/u6 small nuclear ribonucleoprotein prp3; PDBTitle: solution structure of pwi domain in u4/u6 small nuclear2 ribonucleoprotein prp3(hprp3)
90	d1qrjb1	Alignment	not modelled	5.3	16	Fold: Acyl carrier protein-like Superfamily: Retrovirus capsid dimerization domain-like Family: Retrovirus capsid protein C-terminal domain
91	c1v1oB	Alignment	not modelled	5.3	36	PDB header: virulence factor Chain: B: PDB Molecule: exotoxin 1; PDBTitle: staphylococcal superantigen-like protein 7
92	c2k72A	Alignment	not modelled	5.3	33	PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-23; PDBTitle: solution nmr structure of toxin-like potassium channel2 blocking domain in mmp23
93	d2etda1	Alignment	not modelled	5.3	14	Fold: Bromodomain-like Superfamily: LemA-like Family: LemA-like
94	d2tssa2	Alignment	not modelled	5.3	36	Fold: beta-Grasp (ubiquitin-like) Superfamily: Superantigen toxins, C-terminal domain Family: Superantigen toxins, C-terminal domain
95	c4dzoA	Alignment	not modelled	5.3	29	PDB header: cell cycle Chain: A: PDB Molecule: mitotic spindle assembly checkpoint protein mad1; PDBTitle: structure of human mad1 c-terminal domain reveals its involvement in2 kinetochore targeting
96	d2eiaa1	Alignment	not modelled	5.2	16	Fold: Acyl carrier protein-like Superfamily: Retrovirus capsid dimerization domain-like Family: Retrovirus capsid protein C-terminal domain
97	c2w4rB	Alignment	not modelled	5.1	23	PDB header: hydrolase Chain: B: PDB Molecule: probable atp-dependent rna helicase dhx58; PDBTitle: crystal structure of the regulatory domain of human Igp2
98	c2b9sA	Alignment	not modelled	5.1	8	PDB header: isomerase/dna Chain: A: PDB Molecule: topoisomerase i-like protein; PDBTitle: crystal structure of heterodimeric I. donovani2 topoisomerase i-vanadate-dna complex
99	c3l4nA	Alignment	not modelled	5.1	20	PDB header: oxidoreductase Chain: A: PDB Molecule: monothiol glutaredoxin-6; PDBTitle: crystal structure of yeast monothiol glutaredoxin grx6