
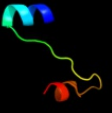


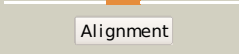



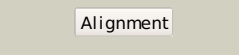

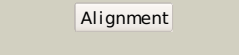

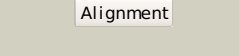

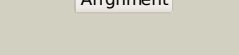

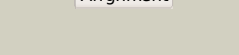

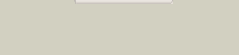





Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P36661
Date	Thu Jan 5 11:53:33 GMT 2012
Unique Job ID	20c5f8f862434c9d

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3pfyA_	 Alignment		93.3	26	PDB header: hydrolase Chain: A: PDB Molecule: otu domain-containing protein 5; PDBTitle: the catalytic domain of human otud5
2	c2zfyA_	 Alignment		80.8	31	PDB header: hydrolase Chain: A: PDB Molecule: ubiquitin thioesterase otub1; PDBTitle: crystal structure of human otubain 1
3	c3c0rC_	 Alignment		80.5	47	PDB header: cell cycle, hydrolase Chain: C: PDB Molecule: ubiquitin thioesterase otu1; PDBTitle: structure of ovarian tumor (otu) domain in complex with ubiquitin
4	c3pt2A_	 Alignment		72.8	27	PDB header: hydrolase/protein binding Chain: A: PDB Molecule: rna polymerase; PDBTitle: structure of a viral otu domain protease bound to ubiquitin
5	d1tffa_	 Alignment		69.4	31	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Ubiquitin thioesterase protein OTUB2 (Otubain-2)
6	d2d32a1	 Alignment		51.7	31	Fold: Glutamine synthetase/guanido kinase Superfamily: Glutamine synthetase/guanido kinase Family: Glutamate-cysteine ligase
7	c3i7fA_	 Alignment		41.2	19	PDB header: ligase Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: aspartyl trna synthetase from entamoeba histolytica
8	c1u9pA_	 Alignment		39.3	25	PDB header: unknown function Chain: A: PDB Molecule: parc; PDBTitle: permuted single-chain arc
9	c1asyA_	 Alignment		36.1	19	PDB header: complex (aminoacyl-trna synthase/trna) Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: class ii aminoacyl transfer rna synthetases: crystal2 structure of yeast aspartyl-trna synthetase complexed with3 trna asp
10	c3m4qA_	 Alignment		35.9	19	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase, putative; PDBTitle: entamoeba histolytica asparaginyl-trna synthetase (asnrs)
11	d1mnta_	 Alignment		27.8	27	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: Arc/Mnt-like phage repressors

12	c1b8aB_	Alignment		23.7	15	PDB header: ligase Chain: B: PDB Molecule: protein (aspartyl-trna synthetase); PDBTitle: aspartyl-trna synthetase
13	c3ln7A_	Alignment		23.4	32	PDB header: ligase Chain: A: PDB Molecule: glutathione biosynthesis bifunctional protein gshab; PDBTitle: crystal structure of a bifunctional glutathione synthetase from2 pasteurella multocida
14	d1ppjw_	Alignment		20.5	60	Fold: Single transmembrane helix Superfamily: Subunit X (non-heme 7 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: Subunit X (non-heme 7 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
15	d1ppji_	Alignment		19.0	60	Fold: Single transmembrane helix Superfamily: Subunit X (non-heme 7 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: Subunit X (non-heme 7 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
16	d2outa1	Alignment		17.3	43	Fold: LEM/SAP HeH motif Superfamily: Rho N-terminal domain-like Family: YqbF C-terminal domain-like
17	c3ln6A_	Alignment		16.6	33	PDB header: ligase Chain: A: PDB Molecule: glutathione biosynthesis bifunctional protein gshab; PDBTitle: crystal structure of a bifunctional glutathione synthetase from2 streptococcus agalactiae
18	d2gp4a1	Alignment		16.1	38	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: IlvD/EDD C-terminal domain-like
19	c2vfjA_	Alignment		16.1	46	PDB header: hydrolase Chain: A: PDB Molecule: tumor necrosis factor; PDBTitle: structure of the a20 ovarian tumour (otu) domain
20	d1y1oa_	Alignment		16.0	46	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: RecU-like
21	c1y1oC_	Alignment	not modelled	16.0	46	PDB header: recombination Chain: C: PDB Molecule: penicillin-binding protein-related factor a; PDBTitle: x-ray crystal structure of penicillin-binding protein-2 related factor a from bacillus stearothermophilus
22	c3dkbA_	Alignment	not modelled	15.9	46	PDB header: hydrolase Chain: A: PDB Molecule: tumor necrosis factor, alpha-induced protein 3; PDBTitle: crystal structure of a20, 2.5 angstrom
23	c3c0mB_	Alignment	not modelled	13.6	28	PDB header: toxin Chain: B: PDB Molecule: aerolysin; PDBTitle: crystal structure of the proaerolysin mutant y221g
24	d1thga_	Alignment	not modelled	11.8	45	Fold: Transmembrane beta-barrels Superfamily: OMPA-like Family: Outer membrane enzyme PagP
25	d1sg7a1	Alignment	not modelled	11.6	47	Fold: ChaB-like Superfamily: ChaB-like Family: ChaB-like
26	c1sg7A_	Alignment	not modelled	11.6	47	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative cation transport regulator chab; PDBTitle: nmr solution structure of the putative cation transport2 regulator chab
27	d1r4xa2	Alignment	not modelled	11.6	24	Fold: Subdomain of clathrin and coatomer appendage domain Superfamily: Subdomain of clathrin and coatomer appendage domain Family: Coatomer appendage domain
28	c2xgtB_	Alignment	not modelled	10.9	29	PDB header: ligase Chain: B: PDB Molecule: asparaginyl-trna synthetase, cytoplasmic; PDBTitle: asparaginyl-trna synthetase from brugia malayi

						complexed2 with the sulphamoyl analogue of asparaginyl-adenylate
29	c3oakC_	Alignment	not modelled	10.8	86	PDB header: transcription Chain: C: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of a spn1 (iws1)-spt6 complex
30	d2ftxb1	Alignment	not modelled	10.3	28	Fold: Kinetochore globular domain-like Superfamily: Kinetochore globular domain Family: Spc24-like
31	c2fv4B_	Alignment	not modelled	10.2	28	PDB header: structural protein, protein binding Chain: B: PDB Molecule: hypothetical 24.6 kda protein in ilv2-ade17 PDBTitle: nmr solution structure of the yeast kinetochore spc24/spc252 globular domain
32	c2vxdA_	Alignment	not modelled	9.8	11	PDB header: nuclear protein Chain: A: PDB Molecule: nucleophosmin; PDBTitle: the structure of the c-terminal domain of nucleophosmin
33	c1ykuB_	Alignment	not modelled	9.8	19	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein pxo2-61; PDBTitle: crystal structure of a sensor domain homolog
34	c2rodB_	Alignment	not modelled	9.6	53	PDB header: apoptosis Chain: B: PDB Molecule: noxaa; PDBTitle: solution structure of mcl-1 complexed with noxaa
35	c1e22A_	Alignment	not modelled	9.5	21	PDB header: ligase Chain: A: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase (lysu) hexagonal form complexed with2 lysine and the non-hydrolysable atp analogue amp-pcp
36	d2cura2	Alignment	not modelled	9.5	100	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
37	c2yfvC_	Alignment	not modelled	9.3	33	PDB header: cell cycle Chain: C: PDB Molecule: scm3; PDBTitle: the heterotrimeric complex of kluyveromyces lactis scm3, cse4 and h4
38	c1p5kA_	Alignment	not modelled	9.3	64	PDB header: ribosome Chain: A: PDB Molecule: 19-mer peptide from 50s ribosomal protein l1; PDBTitle: hp (2-20) substitution ser to leu11 modification in sds-d252 micelles
39	c2jwnB_	Alignment	not modelled	8.4	34	PDB header: rna binding protein Chain: B: PDB Molecule: embryonic polyadenylate-binding protein 2-b; PDBTitle: solution nmr structure of the protease-resistant domain of2 xenopus laevis epabp2
40	c2npiB_	Alignment	not modelled	8.2	26	PDB header: transcription Chain: B: PDB Molecule: protein clp1; PDBTitle: clp1-atp-pcf11 complex
41	c3nztA_	Alignment	not modelled	8.1	27	PDB header: ligase Chain: A: PDB Molecule: glutamate--cysteine ligase; PDBTitle: 2.0 angstrom crystal structure of glutamate--cysteine ligase (gsha)2 from francisella tularensis in complex with amp
42	d2d8za1	Alignment	not modelled	7.7	67	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
43	c2lc0A_	Alignment	not modelled	7.6	18	PDB header: protein binding Chain: A: PDB Molecule: putative uncharacterized protein tb39.8; PDBTitle: rv0020c_ nter structure
44	c3bjuB_	Alignment	not modelled	7.6	24	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: crystal structure of tetrameric form of human lysyl-trna2 synthetase
45	d1o57a1	Alignment	not modelled	7.6	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: N-terminal domain of Bacillus PurR
46	c1sfcD_	Alignment	not modelled	7.5	20	PDB header: transport protein Chain: D: PDB Molecule: protein (snap-25b); PDBTitle: neuronal synaptic fusion complex
47	c2v4oB_	Alignment	not modelled	6.9	46	PDB header: hydrolase Chain: B: PDB Molecule: multifunctional protein sur e; PDBTitle: crystal structure of salmonella typhimurium sure at 2.752 angstrom resolution in monoclinic form
48	d2i9fa1	Alignment	not modelled	6.9	44	Fold: Nucleocapsid protein dimerization domain Superfamily: Nucleocapsid protein dimerization domain Family: Arterivirus nucleocapsid protein
49	c2gloA_	Alignment	not modelled	6.9	32	PDB header: transcription/dna Chain: A: PDB Molecule: brinker cg9653-pa; PDBTitle: solution structure of the brinker dna binding domain in2 complex with the omb enhancer
50	c2yv5A_	Alignment	not modelled	6.9	16	PDB header: hydrolase Chain: A: PDB Molecule: yjeq protein; PDBTitle: crystal structure of yjeq from aquifex aeolicus
51	c3c2vA_	Alignment	not modelled	6.7	20	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of the quinolinate phosphoribosyl2 transferase (bna6) from saccharomyces cerevisiae complexed3 with prpp and the inhibitor phthalate
52	c2f0cC_	Alignment	not modelled	6.7	28	PDB header: virus/viral protein Chain: C: PDB Molecule: phage tp901-1 orf49 (bpp); PDBTitle: structure of the receptor binding protein (orf49, bpp) from lactophage2 tp901-1
53	c1wydB_	Alignment	not modelled	6.6	23	PDB header: ligase Chain: B: PDB Molecule: hypothetical aspartyl-trna synthetase; PDBTitle: crystal structure of aspartyl-trna synthetase from sulfolobus tokodaii

54	c1aq5C_	Alignment	not modelled	6.4	58	PDB header: coiled-coil Chain: C: PDB Molecule: cartilage matrix protein; PDBTitle: high-resolution solution nmr structure of the trimeric coiled-coil2 domain of chicken cartilage matrix protein, 20 structures
55	c1x55A_	Alignment	not modelled	6.4	21	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase; PDBTitle: crystal structure of asparaginyl-trna synthetase from pyrococcus2 horikoshii complexed with asparaginyl-adenylate analogue
56	c3e9hB_	Alignment	not modelled	6.3	18	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase from bacillus stearothermophilus2 complexed with l-lysylsulfamoyl adenosine
57	d2enga_	Alignment	not modelled	6.2	38	Fold: Double psi beta-barrel Superfamily: Barwin-like endoglucanases Family: Eng V-like
58	d1eova2	Alignment	not modelled	6.1	18	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
59	d1f0la3	Alignment	not modelled	6.0	25	Fold: Toxins' membrane translocation domains Superfamily: Diphtheria toxin, middle domain Family: Diphtheria toxin, middle domain
60	d2duca1	Alignment	not modelled	5.8	26	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral cysteine protease of trypsin fold
61	c2i8bB_	Alignment	not modelled	5.8	30	PDB header: viral protein Chain: B: PDB Molecule: minor nucleoprotein vp30; PDBTitle: crystal structure of the c-terminal domain of ebola virus vp30
62	d2al6a2	Alignment	not modelled	5.7	83	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Third domain of FERM
63	d2cs7a1	Alignment	not modelled	5.6	24	Fold: IL8-like Superfamily: PhtA domain-like Family: PhtA domain-like
64	c1p5IA_	Alignment	not modelled	5.6	64	PDB header: ribosome Chain: A: PDB Molecule: 19-mer peptide from 50s ribosomal protein l1; PDBTitle: hp (2-20) substitution phe5 to ser modification in sds-d252 micelles
65	c1p0gA_	Alignment	not modelled	5.4	64	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
66	c2e6gl_	Alignment	not modelled	5.4	31	PDB header: hydrolase Chain: I: PDB Molecule: 5'-nucleotidase sure; PDBTitle: crystal structure of the stationary phase survival protein sure from2 thermus thermophilus hb8 in complex with phosphate
67	c3pmdA_	Alignment	not modelled	5.2	24	PDB header: lipid binding protein Chain: A: PDB Molecule: conserved domain protein; PDBTitle: crystal structure of the sporulation inhibitor pxo1-118 from bacillus2 anthracis
68	d2saka_	Alignment	not modelled	5.1	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: Staphylokinase/streptokinase Family: Staphylokinase/streptokinase