
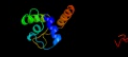
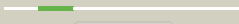














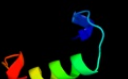






# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0A828
Date	Thu Jan 5 11:06:43 GMT 2012
Unique Job ID	521477ee6ce1da2a

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c1stzB_</a>	 Alignment		66.9	18	<b>PDB header:</b> transcription <b>Chain:</b> B: <b>PDB Molecule:</b> heat-inducible transcription repressor hrca homolog; <b>PDBTitle:</b> crystal structure of a hypothetical protein at 2.2 a resolution
2	<a href="#">dloqya1</a>	 Alignment		54.4	23	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
3	<a href="#">c3d5lA_</a>	 Alignment		43.1	14	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> regulatory protein recx; <b>PDBTitle:</b> crystal structure of regulatory protein recx
4	<a href="#">dlifya_</a>	 Alignment		40.1	25	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
5	<a href="#">c2dakA_</a>	 Alignment		39.9	22	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin carboxyl-terminal hydrolase 5; <b>PDBTitle:</b> solution structure of the second uba domain in the human2 ubiquitin specific protease 5 (isopeptidase 5)
6	<a href="#">d3e46a1</a>	 Alignment		38.7	30	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
7	<a href="#">c3dfgA_</a>	 Alignment		36.8	24	<b>PDB header:</b> recombination <b>Chain:</b> A: <b>PDB Molecule:</b> regulatory protein recx; <b>PDBTitle:</b> crystal structure of recx: a potent inhibitor protein of2 reca from xanthomonas campestris
8	<a href="#">d2cosa1</a>	 Alignment		36.7	32	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
9	<a href="#">c2fu4B_</a>	 Alignment		32.1	21	<b>PDB header:</b> dna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> ferric uptake regulation protein; <b>PDBTitle:</b> crystal structure of the dna binding domain of e.coli fur (ferric2 uptake regulator)
10	<a href="#">c2cosa_</a>	 Alignment		31.8	32	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine protein kinase lats2; <b>PDBTitle:</b> solution structure of rsgi ruh-038, a uba domain from mouse2 lats2 (large tumor suppressor homolog 2)
11	<a href="#">c2l02B_</a>	 Alignment		28.6	17	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution nmr structure of protein bt2368 from bacteroides2 thetaiotaomicron, northeast structural genomics consortium target3 btr375

12	<a href="#">c2crnA_</a>	Alignment		26.4	26	<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> ubash3a protein; <b>PDBTitle:</b> solution structure of the uba domain of human ubash3a2 protein
13	<a href="#">c1dpuA_</a>	Alignment		26.1	19	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> replication protein a (rpa32) c-terminal domain; <b>PDBTitle:</b> solution structure of the c-terminal domain of human rpa322 complexed with ung2(73-88)
14	<a href="#">d1dpua_</a>	Alignment		26.1	19	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> C-terminal domain of RPA32
15	<a href="#">d1t95a1</a>	Alignment		25.4	12	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> Hypothetical protein AF0491, middle domain <b>Family:</b> Hypothetical protein AF0491, middle domain
16	<a href="#">c2w57A_</a>	Alignment		22.4	12	<b>PDB header:</b> metal transport <b>Chain:</b> A: <b>PDB Molecule:</b> ferric uptake regulation protein; <b>PDBTitle:</b> crystal structure of the vibrio cholerae ferric uptake2 regulator (fur) reveals structural rearrangement of the3 dna-binding domains
17	<a href="#">d2g3qa1</a>	Alignment		20.6	30	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
18	<a href="#">d1whqa_</a>	Alignment		19.2	24	<b>Fold:</b> dsRBD-like <b>Superfamily:</b> dsRNA-binding domain-like <b>Family:</b> Double-stranded RNA-binding domain (dsRBD)
19	<a href="#">d1whca_</a>	Alignment		19.1	30	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
20	<a href="#">c2cpwA_</a>	Alignment		18.6	27	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> cbl-interacting protein sts-1 variant; <b>PDBTitle:</b> solution structure of rsgi ruh-031, a uba domain from human2 cdna
21	<a href="#">c3l9kZ_</a>	Alignment	not modelled	18.0	22	<b>PDB header:</b> motor protein <b>Chain:</b> Z: <b>PDB Molecule:</b> dynein intermediate chain, cytosolic; <b>PDBTitle:</b> insights into dynein assembly from a dynein intermediate chain-light2 chain roadblock structure
22	<a href="#">c3kevA_</a>	Alignment	not modelled	17.6	22	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> galleria sulfuraria dcun1 domain-containing protein; <b>PDBTitle:</b> x-ray crystal structure of a dcun1 domain-containing protein from2 galdieria sulfuraria
23	<a href="#">d1wiva_</a>	Alignment	not modelled	17.0	27	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
24	<a href="#">c1fuiB_</a>	Alignment	not modelled	16.5	17	<b>PDB header:</b> isomerase <b>Chain:</b> B: <b>PDB Molecule:</b> l-fucose isomerase; <b>PDBTitle:</b> l-fucose isomerase from escherichia coli
25	<a href="#">d1vega_</a>	Alignment	not modelled	16.3	27	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
26	<a href="#">c3qqmD_</a>	Alignment	not modelled	16.2	23	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> mlr3007 protein; <b>PDBTitle:</b> crystal structure of a putative amino-acid aminotransferase2 (np_104211.1) from mesorhizobium loti at 2.30 a resolution
27	<a href="#">c3a1yF_</a>	Alignment	not modelled	15.5	21	<b>PDB header:</b> ribosomal protein <b>Chain:</b> F: <b>PDB Molecule:</b> 50s ribosomal protein p1 (l12p); <b>PDBTitle:</b> the structure of protein complex
28	<a href="#">c3e3vA_</a>	Alignment	not modelled	15.0	17	<b>PDB header:</b> recombination <b>Chain:</b> A: <b>PDB Molecule:</b> regulatory protein recx; <b>PDBTitle:</b> crystal structure of recx from lactobacillus salivarius

29	<a href="#">dlr4wa</a>	Alignment	not modelled	13.8	10	<b>Fold:</b> Thioredoxin fold <b>Superfamily:</b> Thioredoxin-like <b>Family:</b> DsbA-like
30	<a href="#">dlveka</a>	Alignment	not modelled	13.3	19	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
31	<a href="#">c3eyvA</a>	Alignment	not modelled	13.3	21	<b>PDB header:</b> transport <b>Chain:</b> A: <b>PDB Molecule:</b> putative iron uptake regulatory protein; <b>PDBTitle:</b> structural basis for the specialization of nur, a nickel-2 specific fur homologue, in metal sensing and dna3 recognition
32	<a href="#">c2wbmA</a>	Alignment	not modelled	12.8	12	<b>PDB header:</b> rna-binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> ribosome maturation protein sdo1 homolog; <b>PDBTitle:</b> crystal structure of mthsbd5, the homologue of the2 shwachman-bodian-diamond syndrome protein in the3 euriarchaeon methanothermobacter thermautotrophicus
33	<a href="#">clqzeA</a>	Alignment	not modelled	12.4	13	<b>PDB header:</b> replication <b>Chain:</b> A: <b>PDB Molecule:</b> uv excision repair protein rad23 homolog a; <b>PDBTitle:</b> hhr23a protein structure based on residual dipolar coupling2 data
34	<a href="#">d2cpwa1</a>	Alignment	not modelled	12.3	27	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
35	<a href="#">c2dagA</a>	Alignment	not modelled	12.1	22	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin carboxyl-terminal hydrolase 5; <b>PDBTitle:</b> solution structure of the first uba domain in the human2 ubiquitin specific protease 5 (isopeptidase 5)
36	<a href="#">c2do6A</a>	Alignment	not modelled	11.8	28	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> e3 ubiquitin-protein ligase cbl-b; <b>PDBTitle:</b> solution structure of rsg1 ruh-065, a uba domain from human2 cdna
37	<a href="#">c3itcA</a>	Alignment	not modelled	11.8	13	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> renal dipeptidase; <b>PDBTitle:</b> crystal structure of sco3058 with bound citrate and glycerol
38	<a href="#">d2fi0a1</a>	Alignment	not modelled	11.7	31	<b>Fold:</b> SP0561-like <b>Superfamily:</b> SP0561-like <b>Family:</b> SP0561-like
39	<a href="#">dlhdsa</a>	Alignment	not modelled	11.3	13	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Deoxyhypusine synthase, DHS
40	<a href="#">c3fpnB</a>	Alignment	not modelled	11.2	23	<b>PDB header:</b> dna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> geobacillus stearothermophilus uvrB interaction <b>PDBTitle:</b> crystal structure of uvra-uvrB interaction domains
41	<a href="#">c2fe3B</a>	Alignment	not modelled	11.0	20	<b>PDB header:</b> dna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> peroxide operon regulator; <b>PDBTitle:</b> the crystal structure of bacillus subtilis perr-zn reveals a novel2 zn(cys)4 structural redox switch
42	<a href="#">c2jnhA</a>	Alignment	not modelled	10.4	28	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> e3 ubiquitin-protein ligase cbl-b; <b>PDBTitle:</b> solution structure of the uba domain from cbl-b
43	<a href="#">dlnthA</a>	Alignment	not modelled	10.3	22	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Monomethylamine methyltransferase MtmB <b>Family:</b> Monomethylamine methyltransferase MtmB
44	<a href="#">c2k2pA</a>	Alignment	not modelled	9.9	24	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein atu1203; <b>PDBTitle:</b> solution nmr structure of protein atu1203 from agrobacterium2 tumefaciens. northeast structural genomics consortium (nesg) target3 att10, ontario center for structural proteomics target atc1183
45	<a href="#">c2is9A</a>	Alignment	not modelled	9.8	36	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> defective in cullin neddylation protein 1; <b>PDBTitle:</b> structure of yeast dcn-1
46	<a href="#">c2d9sA</a>	Alignment	not modelled	9.7	33	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> cbl e3 ubiquitin protein ligase; <b>PDBTitle:</b> solution structure of rsg1 ruh-049, a uba domain from mouse2 cdna
47	<a href="#">dl0qya2</a>	Alignment	not modelled	9.6	20	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> UBA domain
48	<a href="#">c2v79B</a>	Alignment	not modelled	9.6	11	<b>PDB header:</b> dna-binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> dna replication protein dnad; <b>PDBTitle:</b> crystal structure of the n-terminal domain of dnad from2 bacillus subtilis
49	<a href="#">c3dp7B</a>	Alignment	not modelled	8.6	26	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> sam-dependent methyltransferase; <b>PDBTitle:</b> crystal structure of sam-dependent methyltransferase from bacteroides2 vulgatus atcc 8482
50	<a href="#">c2daiA</a>	Alignment	not modelled	8.6	37	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin associated domain containing 1; <b>PDBTitle:</b> solution structure of the first uba domain in the human2 ubiquitin associated domain containing 1 (ubadc1)
51	<a href="#">c3ocjA</a>	Alignment	not modelled	8.6	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative exported protein; <b>PDBTitle:</b> the crystal structure of a possilbe exported protein from bordetella2 parapertussis
52	<a href="#">dljjcb1</a>	Alignment	not modelled	8.0	23	<b>Fold:</b> Putative DNA-binding domain <b>Superfamily:</b> Putative DNA-binding domain <b>Family:</b> Domains B1 and B5 of PheRS-beta, PheT
53	<a href="#">dldaaa</a>	Alignment	not modelled	7.9	19	<b>Fold:</b> D-aminoacid aminotransferase-like PLP-dependent enzymes <b>Superfamily:</b> D-aminoacid aminotransferase-like PLP-dependent enzymes <b>Family:</b> D-aminoacid aminotransferase-like PLP-dependent

					enzymes
54	<a href="#">c3o10D_</a>	Alignment	not modelled	7.7	18 <b>PDB header:</b> chaperone <b>Chain:</b> D: <b>PDB Molecule:</b> sacsin; <b>PDBTitle:</b> crystal structure of the hepn domain from human saccin
55	<a href="#">c3nznA_</a>	Alignment	not modelled	7.5	33 <b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> glutaredoxin; <b>PDBTitle:</b> the crystal structure of the glutaredoxin from methanosarcina mazei2 go1
56	<a href="#">d1okra_</a>	Alignment	not modelled	7.3	17 <b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Penicillinase repressor
57	<a href="#">c2l01A_</a>	Alignment	not modelled	7.2	20 <b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution nmr structure of protein bv03908 from bacteroides vulgatus,2 northeast structural genomics consortium target bvr153
58	<a href="#">c2kdoA_</a>	Alignment	not modelled	7.1	12 <b>PDB header:</b> rna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> ribosome maturation protein sbds; <b>PDBTitle:</b> structure of the human shwachman-bodian-diamond syndrome protein, sbds
59	<a href="#">c3gp4B_</a>	Alignment	not modelled	7.0	9 <b>PDB header:</b> transcription regulator <b>Chain:</b> B: <b>PDB Molecule:</b> transcriptional regulator, merr family; <b>PDBTitle:</b> crystal structure of putative merr family transcriptional regulator2 from listeria monocytogenes
60	<a href="#">d1t5la1</a>	Alignment	not modelled	6.9	19 <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Tandem AAA-ATPase domain
61	<a href="#">d1sb6a_</a>	Alignment	not modelled	6.8	24 <b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
62	<a href="#">d1jb0f_</a>	Alignment	not modelled	6.6	22 <b>Fold:</b> Single transmembrane helix <b>Superfamily:</b> Subunit III of photosystem I reaction centre, Psaf <b>Family:</b> Subunit III of photosystem I reaction centre, Psaf
63	<a href="#">d2eyqa4</a>	Alignment	not modelled	6.3	24 <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Tandem AAA-ATPase domain
64	<a href="#">c3hjhA_</a>	Alignment	not modelled	6.3	24 <b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> transcription-repair-coupling factor; <b>PDBTitle:</b> a rigid n-terminal clamp restrains the motor domains of the bacterial2 transcription-repair coupling factor
65	<a href="#">c2e75H_</a>	Alignment	not modelled	6.2	57 <b>PDB header:</b> photosynthesis <b>Chain:</b> H: <b>PDB Molecule:</b> cytochrome b6-f complex subunit 8; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex with 2-nonyl-4-2 hydroxyquinoline n-oxide (nqno) from m.laminosus
66	<a href="#">c2e74H_</a>	Alignment	not modelled	6.2	57 <b>PDB header:</b> photosynthesis <b>Chain:</b> H: <b>PDB Molecule:</b> cytochrome b6-f complex subunit 8; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex from m.laminosus
67	<a href="#">c2e76H_</a>	Alignment	not modelled	6.2	57 <b>PDB header:</b> photosynthesis <b>Chain:</b> H: <b>PDB Molecule:</b> cytochrome b6-f complex subunit 8; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus
68	<a href="#">c3lula_</a>	Alignment	not modelled	6.1	13 <b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> 4-amino-4-deoxychorismate lyase; <b>PDBTitle:</b> crystal structure of putative 4-amino-4-deoxychorismate lyase.2 (yp_094631.1) from legionella pneumophila subsp. pneumophila str.3 philadelphia 1 at 1.78 a resolution
69	<a href="#">d1iyea_</a>	Alignment	not modelled	5.9	19 <b>Fold:</b> D-aminoacid aminotransferase-like PLP-dependent enzymes <b>Superfamily:</b> D-aminoacid aminotransferase-like PLP-dependent enzymes <b>Family:</b> D-aminoacid aminotransferase-like PLP-dependent enzymes
70	<a href="#">d1efub3</a>	Alignment	not modelled	5.7	29 <b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> UBA-like <b>Family:</b> TS-N domain
71	<a href="#">c3c1dA_</a>	Alignment	not modelled	5.6	19 <b>PDB header:</b> recombination, dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> regulatory protein recx; <b>PDBTitle:</b> x-ray crystal structure of recx
72	<a href="#">c2zc2A_</a>	Alignment	not modelled	5.6	18 <b>PDB header:</b> replication <b>Chain:</b> A: <b>PDB Molecule:</b> dnad-like replication protein; <b>PDBTitle:</b> crystal structure of dnad-like replication protein from2 streptococcus mutans ua159, gi 24377835, residues 127-199
73	<a href="#">d1w6ka1</a>	Alignment	not modelled	5.5	22 <b>Fold:</b> alpha/alpha toroid <b>Superfamily:</b> Terpenoid cyclases/Protein prenyltransferases <b>Family:</b> Terpene synthases
74	<a href="#">c2abjG_</a>	Alignment	not modelled	5.4	20 <b>PDB header:</b> transferase <b>Chain:</b> G: <b>PDB Molecule:</b> branched-chain-amino-acid aminotransferase, cytosolic; <b>PDBTitle:</b> crystal structure of human branched chain amino acid transaminase in a2 complex with an inhibitor, c16h10n2o4f3scl, and pyridoxal 5'3 phosphate.
75	<a href="#">c1t95A_</a>	Alignment	not modelled	5.4	12 <b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein af0491; <b>PDBTitle:</b> crystal structure of the shwachman-bodian-diamond syndrome2 protein orthologue from archaeoglobus fulgidus
76	<a href="#">d2b2na1</a>	Alignment	not modelled	5.4	24 <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Tandem AAA-ATPase domain
77	<a href="#">d1m2ia_</a>	Alignment	not modelled	5.3	33 <b>Fold:</b> Cytochrome b5-like heme/steroid binding domain <b>Superfamily:</b> Cytochrome b5-like heme/steroid binding domain <b>Family:</b> Cytochrome b5
78	<a href="#">c3itfA_</a>	Alignment	not modelled	5.3	21 <b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> periplasmic adaptor protein cpxp; <b>PDBTitle:</b> structural basis for the inhibitory function of the cpxp

