













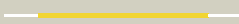

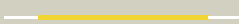





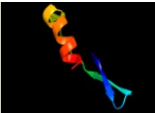


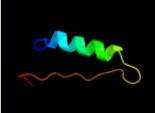
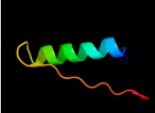


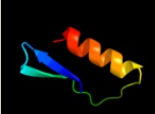



Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AEQ1
Date	Thu Jan 5 11:23:55 GMT 2012
Unique Job ID	7f92fae55c6ed262

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2a2la1	 Alignment		100.0	31	Fold: Profilin-like Superfamily: GlcG-like Family: GlcG-like
2	c3fpvC_	 Alignment		100.0	31	PDB header: heme binding protein Chain: C: PDB Molecule: extracellular haem-binding protein; PDBTitle: crystal structure of hbps
3	clysqa_	 Alignment		92.3	12	PDB header: gene regulation Chain: A: PDB Molecule: hth-type transcriptional regulator yiaj; PDBTitle: the crystal structure of transcriptional regulator yaij
4	d2o9aa1	 Alignment		88.8	13	Fold: Profilin-like Superfamily: GAF domain-like Family: IclR ligand-binding domain-like
5	clyspA_	 Alignment		85.8	16	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator kdgr; PDBTitle: crystal structure of the c-terminal domain of e. coli transcriptional2 regulator kdgr.
6	d1tf1a_	 Alignment		83.9	10	Fold: Profilin-like Superfamily: GAF domain-like Family: IclR ligand-binding domain-like
7	c2w1rA_	 Alignment		78.7	37	PDB header: transcription Chain: A: PDB Molecule: stage v sporulation protein t; PDBTitle: crystal structure of the c-terminal domain of b. subtilis2 spovt
8	d1mkma2	 Alignment		74.0	17	Fold: Profilin-like Superfamily: GAF domain-like Family: IclR ligand-binding domain-like
9	c1mkmA_	 Alignment		71.1	17	PDB header: transcription Chain: A: PDB Molecule: iclR transcriptional regulator; PDBTitle: crystal structure of the thermotoga maritima iclR
10	c2g7uB_	 Alignment		69.8	22	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: transcriptional regulator; PDBTitle: 2.3 a structure of putative catechol degradative operon regulator from2 rhodococcus sp. rha1
11	c3bjnA_	 Alignment		68.3	17	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, putative; PDBTitle: crystal structure of c-terminal domain of putative transcriptional2 regulator from vibrio cholerae, targeted domain 79-240

12	c3r4kD_	Alignment		62.3	22	PDB header: dna binding protein Chain: D: PDB Molecule: transcriptional regulator, iclr family; PDBTitle: crystal structure of a putative iclr transcriptional regulator2 (tm1040_3717) from silicibacter sp. tm1040 at 2.46 a resolution
13	c3obfA_	Alignment		61.4	9	PDB header: transcription regulator Chain: A: PDB Molecule: putative transcriptional regulator, iclr family; PDBTitle: crystal structure of putative transcriptional regulator, iclr family;2 targeted domain 129...302
14	c3ksiA_	Alignment		60.2	24	PDB header: oxidoreductase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: structure of frmsr of staphylococcus aureus (complex with 2-propanol)
15	d1lruk_	Alignment		57.6	28	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
16	d1lruI_	Alignment		55.8	8	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
17	c3mq0A_	Alignment		51.4	11	PDB header: transcription repressor Chain: A: PDB Molecule: transcriptional repressor of the blcabc operon; PDBTitle: crystal structure of agobacterium tumefaciens repressor blcr
18	c2ia2D_	Alignment		49.9	19	PDB header: transcription Chain: D: PDB Molecule: putative transcriptional regulator; PDBTitle: the crystal structure of a putative transcriptional regulator rha061952 from rhodococcus sp. rha1
19	c2o9bA_	Alignment		48.1	25	PDB header: transferase Chain: A: PDB Molecule: bacteriophytochrome; PDBTitle: crystal structure of bacteriophytochrome chromophore binding domain
20	c1q5rD_	Alignment		46.5	20	PDB header: hydrolase Chain: D: PDB Molecule: proteasome alpha-type subunit 1; PDBTitle: the rhodococcus 20s proteasome with unprocessed pro-peptides
21	d1vhma_	Alignment	not modelled	46.4	36	Fold: Profilin-like Superfamily: GAF domain-like Family: GAF domain
22	c2oolA_	Alignment	not modelled	46.3	25	PDB header: signaling protein Chain: A: PDB Molecule: sensor protein; PDBTitle: crystal structure of the chromophore-binding domain of an unusual2 bacteriophytochrome rpbphp3 from r. palustris
23	d1lru2_	Alignment	not modelled	44.5	16	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
24	d1p0za_	Alignment	not modelled	43.4	23	Fold: Profilin-like Superfamily: Sensory domain-like Family: Sensory domain of two-component sensor kinase
25	d1lruI_	Alignment	not modelled	43.1	13	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
26	d1rypi_	Alignment	not modelled	43.0	19	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
27	c3nzwH_	Alignment	not modelled	42.6	19	PDB header: hydrolase/hydrolase inhibitor Chain: H: PDB Molecule: proteasome component pup1; PDBTitle: crystal structure of the yeast 20s proteasome in complex with 2b
28	d1lruh_	Alignment	not modelled	39.8	11	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
29	d1lrvh_	Alignment	not modelled	39.6	17	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn

29	d1ryp1_	Alignment	not modelled	39.0	17	hydrolases) Family: Proteasome subunits
30	c2o0yB_	Alignment	not modelled	38.4	19	PDB header: transcription Chain: B: PDB Molecule: transcriptional regulator; PDBTitle: crystal structure of putative transcriptional regulator rha1_ro069532 (iclr-family) from rhodococcus sp.
31	d1ryp1_	Alignment	not modelled	38.1	18	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
32	d1ryp1_	Alignment	not modelled	35.7	11	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
33	d1q5qa_	Alignment	not modelled	35.6	20	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
34	c3bcbA_	Alignment	not modelled	34.7	25	PDB header: cell adhesion, ribosomal protein Chain: A: PDB Molecule: 40s ribosomal protein sa; PDBTitle: crystal structure of the human laminin receptor precursor
35	c1vhmB_	Alignment	not modelled	34.5	36	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein yeb7; PDBTitle: crystal structure of an hypothetical protein
36	d1lruj_	Alignment	not modelled	34.4	8	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
37	c3dbaB_	Alignment	not modelled	33.7	14	PDB header: hydrolase Chain: B: PDB Molecule: cone cgmp-specific 3',5'-cyclic phosphodiesterase subunit PDBTitle: crystal structure of the cgmp-bound gaf a domain from the2 photoreceptor phosphodiesterase 6c
38	c2w1tB_	Alignment	not modelled	32.0	33	PDB header: transcription Chain: B: PDB Molecule: stage v sporulation protein t; PDBTitle: crystal structure of b. subtilis spvt
39	d1q5rh_	Alignment	not modelled	31.8	8	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
40	c3ajvA_	Alignment	not modelled	31.5	21	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: splicing endonuclease from aeropyrum pernix
41	d1lru1_	Alignment	not modelled	29.6	16	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
42	c2zyzA_	Alignment	not modelled	29.4	10	PDB header: splicing Chain: A: PDB Molecule: putative uncharacterized protein pae0789; PDBTitle: pyrobaculum aerophilum splicing endonuclease
43	d1ryp1_	Alignment	not modelled	29.0	11	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
44	c2gx5B_	Alignment	not modelled	28.2	24	PDB header: transcription Chain: B: PDB Molecule: gtp-sensing transcriptional pleiotropic repressor cody; PDBTitle: n-terminal gaf domain of transcriptional pleiotropic repressor cody
45	c3nzkK_	Alignment	not modelled	28.0	14	PDB header: hydrolase/hydrolase inhibitor Chain: K: PDB Molecule: proteasome component pre2; PDBTitle: crystal structure of the yeast 20s proteasome in complex with ligand2_2c
46	c3d3oA_	Alignment	not modelled	27.7	11	PDB header: transcription regulator Chain: A: PDB Molecule: putative transcriptional regulator, iclr family; PDBTitle: crystal structure of the effector domain of the putative2 transcriptional regulator iclr from acinetobacter sp. adp1
47	c2k31A_	Alignment	not modelled	27.3	16	PDB header: hydrolase Chain: A: PDB Molecule: phosphodiesterase 5a, cgmp-specific; PDBTitle: solution structure of cgmp-binding gaf domain of 2 phosphodiesterase 5
48	d1k3sa_	Alignment	not modelled	25.5	30	Fold: Secretion chaperone-like Superfamily: Type III secretory system chaperone-like Family: Type III secretory system chaperone
49	c1h4uA_	Alignment	not modelled	24.9	26	PDB header: extracellular matrix protein Chain: A: PDB Molecule: nidogen-1; PDBTitle: domain g2 of mouse nidogen-1
50	d2veaa1	Alignment	not modelled	24.7	19	Fold: Profilin-like Superfamily: GAF domain-like Family: GAF domain
51	d2o9ca1	Alignment	not modelled	24.6	44	Fold: Profilin-like Superfamily: GAF domain-like Family: GAF domain
52	c3p01C_	Alignment	not modelled	24.1	11	PDB header: signaling protein Chain: C: PDB Molecule: two-component response regulator; PDBTitle: crystal structure of two-component response regulator from nostoc sp.2 pcc 7120
53	d2uubb1	Alignment	not modelled	23.5	36	Fold: Flavodoxin-like Superfamily: Ribosomal protein S2 Family: Ribosomal protein S2
54	d1rypk_	Alignment	not modelled	23.4	14	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits PDB header: structural genomics, unknown function

55	c3eeaB	Alignment	not modelled	23.3	28	Chain: B: PDB Molecule: gaf domain/hd domain protein; PDBTitle: the crystal structure of the gaf domain/hd domain protein2 from geobacter sulfurreducens
56	d1b28a	Alignment	not modelled	22.8	17	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: Arc/Mnt-like phage repressors
57	d3c2wa1	Alignment	not modelled	22.3	27	Fold: Profilin-like Superfamily: GAF domain-like Family: GAF domain
58	d1r5ta	Alignment	not modelled	21.1	6	Fold: Cytidine deaminase-like Superfamily: Cytidine deaminase-like Family: Cytidine deaminase
59	c3mmhA	Alignment	not modelled	20.5	17	PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase; PDBTitle: x-ray structure of free methionine-r-sulfoxide reductase from2 neisseria meningitidis in complex with its substrate
60	c3bbnB	Alignment	not modelled	20.3	14	PDB header: ribosome Chain: B: PDB Molecule: ribosomal protein s2; PDBTitle: homology model for the spinach chloroplast 30s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome.
61	c2fhgC	Alignment	not modelled	19.4	8	PDB header: hydrolase Chain: C: PDB Molecule: proteasome, beta subunit; PDBTitle: crystal structure of mycobacterial tuberculosis proteasome
62	c3izbA	Alignment	not modelled	18.6	29	PDB header: ribosome Chain: A: PDB Molecule: 40s ribosomal protein rps0 (s2p); PDBTitle: localization of the small subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
63	d2oola1	Alignment	not modelled	17.5	19	Fold: Profilin-like Superfamily: GAF domain-like Family: GAF domain
64	d1mq0a	Alignment	not modelled	17.4	13	Fold: Cytidine deaminase-like Superfamily: Cytidine deaminase-like Family: Cytidine deaminase
65	c2zkqb	Alignment	not modelled	17.1	25	PDB header: ribosomal protein/rna Chain: B: PDB Molecule: rna expansion segment es3; PDBTitle: structure of a mammalian ribosomal 40s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
66	c3h4pj	Alignment	not modelled	16.4	17	PDB header: hydrolase Chain: J: PDB Molecule: proteasome subunit alpha; PDBTitle: proteasome 20s core particle from methanocaldococcus2 jannaschii
67	d1bdta	Alignment	not modelled	16.3	17	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: Arc/Mnt-like phage repressors
68	d1xmta	Alignment	not modelled	16.2	29	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
69	d1iruc	Alignment	not modelled	16.1	12	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
70	d1ktea	Alignment	not modelled	16.0	38	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
71	d2gy9b1	Alignment	not modelled	15.9	23	Fold: Flavodoxin-like Superfamily: Ribosomal protein S2 Family: Ribosomal protein S2
72	c3c1sA	Alignment	not modelled	15.6	38	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaredoxin-1; PDBTitle: crystal structure of grx1 in glutathionylated form
73	d1irub	Alignment	not modelled	15.6	11	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
74	c3d5jB	Alignment	not modelled	15.5	46	PDB header: oxidoreductase Chain: B: PDB Molecule: glutaredoxin-2, mitochondrial; PDBTitle: structure of yeast grx2-c30s mutant with glutathionyl mixed2 disulfide
75	d1wosa1	Alignment	not modelled	15.2	21	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: Aminomethyltransferase beta-barrel domain Family: Aminomethyltransferase beta-barrel domain
76	c2jacA	Alignment	not modelled	15.1	38	PDB header: electron transport Chain: A: PDB Molecule: glutaredoxin-1; PDBTitle: glutaredoxin grx1p c30s mutant from yeast
77	d1legoa	Alignment	not modelled	14.8	54	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
78	c3ipza	Alignment	not modelled	14.7	25	PDB header: electron transport, oxidoreductase Chain: A: PDB Molecule: monothiol glutaredoxin-s14, chloroplastic; PDBTitle: crystal structure of arabidopsis monothiol glutaredoxin atgrxcp
79	d1q5qh	Alignment	not modelled	14.5	8	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
80	c2h6jl	Alignment	not modelled	14.5	8	PDB header: hydrolase Chain: I: PDB Molecule: proteasome beta-type subunit 1; PDBTitle: crystal structure of the beta f145a rhodococcus proteasome (casp2 target) PDB header: hydrolase/rna binding protein

81	c3ieyB_	Alignment	not modelled	14.3	13	Chain: B: PDB Molecule: neq261; PDBTitle: crystal structure of the functional nanoarchaeum equitans trna2 splicing endonuclease
82	c2hzfA_	Alignment	not modelled	14.0	31	PDB header: electron transport, oxidoreductase Chain: A: PDB Molecule: glutaredoxin-1; PDBTitle: crystal structures of a poxviral glutaredoxin in the oxidized and2 reduced states show redox-correlated structural changes
83	c2ht9A_	Alignment	not modelled	13.8	46	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaredoxin-2; PDBTitle: the structure of dimeric human glutaredoxin 2
84	c3ef5A_	Alignment	not modelled	13.7	18	PDB header: hydrolase Chain: A: PDB Molecule: probable pyrophosphohydrolase; PDBTitle: structure of the rna pyrophosphohydrolase bdrpph in complex with dgtp
85	c1s1hB_	Alignment	not modelled	13.2	33	PDB header: ribosome Chain: B: PDB Molecule: 40s ribosomal protein s0-a; PDBTitle: structure of the ribosomal 80s-eef2-sordarin complex from2 yeast obtained by docking atomic models for rna and protein3 components into a 11.7 a cryo-em map. this file, 1s1h,4 contains 40s subunit. the 60s ribosomal subunit is in file5 1s1i.
86	c3r2nC_	Alignment	not modelled	13.0	13	PDB header: hydrolase Chain: C: PDB Molecule: cytidine deaminase; PDBTitle: crystal structure of cytidine deaminase from mycobacterium leprae
87	d1jhba_	Alignment	not modelled	12.9	38	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
88	c2e7pC_	Alignment	not modelled	12.8	46	PDB header: electron transport Chain: C: PDB Molecule: glutaredoxin; PDBTitle: crystal structure of the holo form of glutaredoxin c1 from populus2 tremula x tremuloides
89	c2wulB_	Alignment	not modelled	12.5	33	PDB header: oxidoreductase Chain: B: PDB Molecule: glutaredoxin related protein 5; PDBTitle: crystal structure of the human glutaredoxin 5 with bound2 glutathione in an fes cluster
90	d1pj5a1	Alignment	not modelled	12.5	21	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: Aminomethyltransferase beta-barrel domain Family: Aminomethyltransferase beta-barrel domain
91	c3p01A_	Alignment	not modelled	12.4	11	PDB header: signaling protein Chain: A: PDB Molecule: two-component response regulator; PDBTitle: crystal structure of two-component response regulator from nostoc sp.2 pcc 7120
92	c2c5sA_	Alignment	not modelled	12.4	47	PDB header: rna-binding protein Chain: A: PDB Molecule: probable thiamine biosynthesis protein thii; PDBTitle: crystal structure of bacillus anthracis thii, a trna-2 modifying enzyme containing the predicted rna-binding3 thump domain
93	c3o5yA_	Alignment	not modelled	12.1	14	PDB header: transcription regulator Chain: A: PDB Molecule: sensor protein; PDBTitle: the crystal structure of the gaf domain of a two-component sensor2 histidine kinase from bacillus halodurans to 2.45a
94	d1j2qh_	Alignment	not modelled	12.1	8	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
95	c1mc0A_	Alignment	not modelled	12.0	22	PDB header: hydrolase Chain: A: PDB Molecule: 3',5'-cyclic nucleotide phosphodiesterase 2a; PDBTitle: regulatory segment of mouse 3',5'-cyclic nucleotide phosphodiesterase2 2a, containing the gaf a and gaf b domains
96	c2xznb_	Alignment	not modelled	11.7	33	PDB header: ribosome Chain: B: PDB Molecule: rps0e; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
97	d1yarh1	Alignment	not modelled	11.5	8	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
98	c3h8qB_	Alignment	not modelled	11.0	31	PDB header: oxidoreductase Chain: B: PDB Molecule: thioredoxin reductase 3; PDBTitle: crystal structure of glutaredoxin domain of human thioredoxin2 reductase 3
99	c3l4nA_	Alignment	not modelled	11.0	42	PDB header: oxidoreductase Chain: A: PDB Molecule: monothiol glutaredoxin-6; PDBTitle: crystal structure of yeast monothiol glutaredoxin grx6