



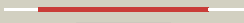








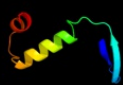


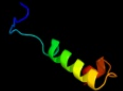








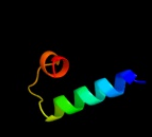

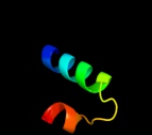




Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AGF2
Date	Thu Jan 5 11:28:56 GMT 2012
Unique Job ID	b99ebada91738a1b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dlni7a_	 Alignment		100.0	100	Fold: SufE/NifU Superfamily: SufE/NifU Family: SufE-like
2	dlmzga_	 Alignment		100.0	33	Fold: SufE/NifU Superfamily: SufE/NifU Family: SufE-like
3	clwloA_	 Alignment		100.0	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sufe protein; PDBTitle: solution structure of the hypothetical protein from thermus2 thermophilus hb8
4	dlr9pa_	 Alignment		95.8	22	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
5	dlwfza_	 Alignment		91.7	19	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
6	c2z7eB_	 Alignment		83.7	19	PDB header: biosynthetic protein Chain: B: PDB Molecule: nifu-like protein; PDBTitle: crystal structure of aquifex aeolicus iscu with bound [2fe-2 2s] cluster
7	c2iy9A_	 Alignment		63.5	25	PDB header: toxin Chain: A: PDB Molecule: suba; PDBTitle: crystal structure of the a-subunit of the ab5 toxin from e.2 coli
8	dlqcia_	 Alignment		62.8	15	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
9	c2b6nA_	 Alignment		62.0	18	PDB header: hydrolase Chain: A: PDB Molecule: proteinase k; PDBTitle: the 1.8 a crystal structure of a proteinase k like enzyme from a2 psychrotroph serratia species
10	dlr0re_	 Alignment		59.4	20	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
11	cls2nB_	 Alignment		58.8	27	PDB header: hydrolase Chain: B: PDB Molecule: extracellular subtilisin-like serine proteinase; PDBTitle: crystal strucure of a cold adapted subtilisin-like serine proteinase

12	d2ixta1	Alignment		55.3	20	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
13	c2w2qA_	Alignment		54.4	35	PDB header: hydrolase/receptor Chain: A: PDB Molecule: proprotein convertase subtilisin/kexin type 9; PDBTitle: pcsk9-deltac d374h mutant bound to wt egf-a of ldlr
14	c3f7oB_	Alignment		53.4	20	PDB header: hydrolase Chain: B: PDB Molecule: serine protease; PDBTitle: crystal structure of cuticle-degrading protease from paecilomyces2 lilacinus (pl646)
15	c2oxaA_	Alignment		52.0	19	PDB header: hydrolase Chain: A: PDB Molecule: extracellular serine protease; PDBTitle: crystal structure of serine protease of aeromonas sobria
16	d1gnsa_	Alignment		51.3	18	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
17	d1p8ja2	Alignment		50.2	23	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
18	d1to2e_	Alignment		47.6	19	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
19	c2qq4A_	Alignment		47.4	18	PDB header: metal binding protein Chain: A: PDB Molecule: iron-sulfur cluster biosynthesis protein iscu; PDBTitle: crystal structure of iron-sulfur cluster biosynthesis2 protein iscu (tha1736) from thermus thermophilus hb8
20	d1v6ca_	Alignment		45.9	15	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
21	d2id4a2	Alignment	not modelled	45.4	23	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
22	d1pdaa2	Alignment	not modelled	43.9	14	Fold: dsRBD-like Superfamily: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain Family: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain
23	c1r64A_	Alignment	not modelled	43.1	23	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: kexin; PDBTitle: the 2.2 a crystal structure of kex2 protease in complex with ac-arg-2 glu-lys-boroarg peptidyl boronic acid inhibitor
24	c1p8jB_	Alignment	not modelled	40.8	23	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: furin precursor; PDBTitle: crystal structure of the proprotein convertase furin
25	c3qfHE_	Alignment	not modelled	40.4	18	PDB header: hydrolase Chain: E: PDB Molecule: epidermin leader peptide processing serine protease epip; PDBTitle: 2.05 angstrom resolution crystal structure of epidermin leader peptide2 processing serine protease (epip) from staphylococcus aureus.
26	d1gtka2	Alignment	not modelled	39.1	14	Fold: dsRBD-like Superfamily: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain Family: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain
27	d1bh6a_	Alignment	not modelled	38.7	19	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
						PDB header: hydrolase

28	c3lpcA_	Alignment	not modelled	33.3	35	Chain: A: PDB Molecule: aprb2; PDBTitle: crystal structure of a subtilisin-like protease
29	c3bpsA_	Alignment	not modelled	32.4	35	PDB header: hydrolase/lipid transport Chain: A: PDB Molecule: proprotein convertase subtilisin/kexin type 9; PDBTitle: pcsk9:egf-a complex
30	dlnexa1	Alignment	not modelled	31.1	26	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
31	d1xjsa_	Alignment	not modelled	27.0	18	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
32	d1fs1b1	Alignment	not modelled	26.9	39	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
33	c2yukA_	Alignment	not modelled	25.6	14	PDB header: transferase Chain: A: PDB Molecule: myeloid/lymphoid or mixed-lineage leukemia PDBTitle: solution structure of the hmg box of human myeloid/lymphoid2 or mixed-lineage leukemia protein 3 homolog
34	d1fs2b1	Alignment	not modelled	25.5	39	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
35	d1su0b_	Alignment	not modelled	24.8	21	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
36	d2pwaa1	Alignment	not modelled	23.5	23	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
37	d1r6va_	Alignment	not modelled	22.2	23	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
38	d1meeA_	Alignment	not modelled	22.0	23	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
39	d2qlra2	Alignment	not modelled	18.8	8	Fold: PEP carboxykinase N-terminal domain Superfamily: PEP carboxykinase N-terminal domain Family: PEP carboxykinase N-terminal domain
40	c2ypnA_	Alignment	not modelled	18.1	14	PDB header: transferase Chain: A: PDB Molecule: protein (hydroxymethylbilane synthase); PDBTitle: hydroxymethylbilane synthase
41	d2ovra1	Alignment	not modelled	17.8	39	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
42	c3t41B_	Alignment	not modelled	17.3	16	PDB header: hydrolase Chain: B: PDB Molecule: epidermin leader peptide processing serine protease epip; PDBTitle: 1.95 angstrom resolution crystal structure of epidermin leader peptide2 processing serine protease (epip) s393a mutant from staphylococcus3 aureus
43	d1go4a_	Alignment	not modelled	17.3	12	Fold: The spindle assembly checkpoint protein mad2 Superfamily: The spindle assembly checkpoint protein mad2 Family: The spindle assembly checkpoint protein mad2
44	c3e21A_	Alignment	not modelled	14.7	19	PDB header: apoptosis Chain: A: PDB Molecule: fas-associated factor 1; PDBTitle: crystal structure of faf-1 uba domain
45	d1luca_	Alignment	not modelled	13.9	14	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Bacterial luciferase (alkanal monooxygenase)
46	d2hh6a1	Alignment	not modelled	13.8	33	Fold: Left-handed superhelix Superfamily: BH3980-like Family: BH3980-like
47	c3gq2B_	Alignment	not modelled	13.7	20	PDB header: transport protein Chain: B: PDB Molecule: general vesicular transport factor p115; PDBTitle: crystal structure of the dimer of the p115 tether globular head domain
48	d1ii2a2	Alignment	not modelled	12.4	20	Fold: PEP carboxykinase N-terminal domain Superfamily: PEP carboxykinase N-terminal domain Family: PEP carboxykinase N-terminal domain
49	c3lysC_	Alignment	not modelled	12.1	17	PDB header: recombination Chain: C: PDB Molecule: prophage pi2 protein 01, integrase; PDBTitle: crystal structure of the n-terminal domain of the prophage2 pi2 protein 01 (integrase) from lactococcus lactis,3 northeast structural genomics consortium target kr124f
50	d1dbia_	Alignment	not modelled	11.9	25	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
51	c3i74B_	Alignment	not modelled	10.7	15	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: subtilisin-like protease; PDBTitle: crystal structure of the plant subtilisin-like protease sbt3 in2 complex with a chloromethylketone inhibitor
52	c2w0gA_	Alignment	not modelled	10.6	27	PDB header: chaperone Chain: A: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: hsp90 co-chaperone cdc37
53	c2gjfF_	Alignment	not modelled	10.3	19	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: putative cytoplasmic protein; PDBTitle: crystal structure of a protein of unknown function from salmonella2 typhimurium
						PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome c-type biogenesis protein

54	c2hi7A	Alignment	not modelled	10.1	23	ccmh; PDBTitle: crystal structure of the periplasmic domain of ccmh from pseudomonas2 aeruginosa
55	d2gjva1	Alignment	not modelled	10.1	19	Fold: Phage tail protein-like Superfamily: Phage tail protein-like Family: STM4215-like
56	c2w3cA	Alignment	not modelled	10.1	20	PDB header: transport protein Chain: A: PDB Molecule: general vesicular transport factor p115; PDBTitle: globular head region of the human general vesicular2 transport factor p115
57	c2qk1A	Alignment	not modelled	10.0	7	PDB header: protein binding Chain: A: PDB Molecule: protein stu2; PDBTitle: structural basis of microtubule plus end tracking by2 xmap215, clip-170 and eb1
58	c2kkaA	Alignment	not modelled	9.8	15	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of the phage integrase sam-like2 domain from moth 1796 from moorella thermoacetica.3 northeast structural genomics consortium target mtr39k4 (residues 64-171).
59	c1bq0A	Alignment	not modelled	9.8	8	PDB header: chaperone Chain: A: PDB Molecule: dnaj; PDBTitle: j-domain (residues 1-77) of the escherichia coli n-terminal2 fragment (residues 1-104) of the molecular chaperone dnaj,3 nmr, 20 structures
60	d1w6ka2	Alignment	not modelled	8.9	17	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Terpene synthases
61	d1gm5a1	Alignment	not modelled	8.9	22	Fold: Four-helical up-and-down bundle Superfamily: RecG, N-terminal domain Family: RecG, N-terminal domain
62	d1n83a	Alignment	not modelled	8.6	6	Fold: Nuclear receptor ligand-binding domain Superfamily: Nuclear receptor ligand-binding domain Family: Nuclear receptor ligand-binding domain
63	d1us7b	Alignment	not modelled	8.5	27	Fold: Hsp90 co-chaperone CDC37 Superfamily: Hsp90 co-chaperone CDC37 Family: Hsp90 co-chaperone CDC37
64	c1us7B	Alignment	not modelled	8.5	27	PDB header: chaperone Chain: B: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: complex of hsp90 and p50
65	c2kykA	Alignment	not modelled	8.5	29	PDB header: ligase Chain: A: PDB Molecule: e3 ubiquitin-protein ligase itchy homolog; PDBTitle: the sandwich region between two Imp2a py motif regulates the2 interaction between aip4ww2domain and py motif
66	c3lbdA	Alignment	not modelled	7.9	7	PDB header: nuclear receptor Chain: A: PDB Molecule: retinoic acid receptor gamma; PDBTitle: ligand-binding domain of the human retinoic acid receptor2 gamma bound to 9-cis retinoic acid
67	c3bvoA	Alignment	not modelled	7.6	16	PDB header: chaperone Chain: A: PDB Molecule: co-chaperone protein hscb, mitochondrial precursor; PDBTitle: crystal structure of human co-chaperone protein hscb
68	c3dmbA	Alignment	not modelled	7.5	16	PDB header: oxidoreductase Chain: A: PDB Molecule: putative general stress protein 26 with a pnp-oxidase like PDBTitle: crystal structure of a putative general stress family protein2 (xcc2264) from xanthomonas campestris pv. campestris at 2.30 a3 resolution
69	c2oaxC	Alignment	not modelled	7.4	29	PDB header: transcription Chain: C: PDB Molecule: mineralocorticoid receptor; PDBTitle: crystal structure of the s810l mutant mineralocorticoid2 receptor associated with sc9420
70	c2kvha	Alignment	not modelled	7.2	24	PDB header: transcription Chain: A: PDB Molecule: zinc finger and btb domain-containing protein 32; PDBTitle: structure of the three-cys2his2 domain of mouse testis zinc2 finger protein
71	c2dl0A	Alignment	not modelled	7.2	17	PDB header: signaling protein Chain: A: PDB Molecule: sam and sh3 domain-containing protein 1; PDBTitle: solution structure of the sam-domain of the sam and sh32 domain containing protein 1
72	d1fpoa1	Alignment	not modelled	7.1	17	Fold: Long alpha-hairpin Superfamily: Chaperone J-domain Family: Chaperone J-domain
73	d1x40a1	Alignment	not modelled	7.1	13	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
74	d1xbla	Alignment	not modelled	6.9	8	Fold: Long alpha-hairpin Superfamily: Chaperone J-domain Family: Chaperone J-domain
75	c3eq1A	Alignment	not modelled	6.7	22	PDB header: transferase Chain: A: PDB Molecule: porphobilinogen deaminase; PDBTitle: the crystal structure of human porphobilinogen deaminase at2 2.8a resolution
76	d1coka	Alignment	not modelled	6.7	27	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
77	c2kg5A	Alignment	not modelled	6.7	16	PDB header: signaling protein Chain: A: PDB Molecule: arf-gap, rho-gap domain, ank repeat and ph PDBTitle: nmr solution structure of arap3-sam
78	d1dd4c	Alignment	not modelled	6.6	21	Fold: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Superfamily: Ribosomal protein L7/12, oligomerisation (N-terminal) domain

						Family: Ribosomal protein L7/12, oligomerisation (N-terminal) domain
79	d2fiqa1	Alignment	not modelled	6.5	22	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: GatZ-like
80	d1dd3a1	Alignment	not modelled	6.5	21	Fold: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Superfamily: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Family: Ribosomal protein L7/12, oligomerisation (N-terminal) domain
81	d1pq9a_	Alignment	not modelled	6.4	12	Fold: Nuclear receptor ligand-binding domain Superfamily: Nuclear receptor ligand-binding domain Family: Nuclear receptor ligand-binding domain
82	d1dd4d_	Alignment	not modelled	6.2	21	Fold: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Superfamily: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Family: Ribosomal protein L7/12, oligomerisation (N-terminal) domain
83	d1i36a1	Alignment	not modelled	6.1	20	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: Conserved hypothetical protein MTH1747
84	c2kd1A_	Alignment	not modelled	6.1	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dna integration/recombination/inversion protein; PDBTitle: solution nmr structure of the integrase-like domain from2 bacillus cereus ordered locus bc_1272. northeast3 structural genomics consortium target bcr268f
85	c2kw0A_	Alignment	not modelled	6.0	27	PDB header: oxidoreductase Chain: A: PDB Molecule: ccmh protein; PDBTitle: solution structure of n-terminal domain of cmh from escherichia.coli
86	d1hdja_	Alignment	not modelled	5.9	9	Fold: Long alpha-hairpin Superfamily: Chaperone J-domain Family: Chaperone J-domain
87	d1sgga_	Alignment	not modelled	5.8	13	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
88	d1loxja1	Alignment	not modelled	5.7	7	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
89	c2wwaj_	Alignment	not modelled	5.7	33	PDB header: ribosome Chain: J: PDB Molecule: 60s ribosomal protein l19; PDBTitle: cryo-em structure of idle yeast ssh1 complex bound to the2 yeast 80s ribosome
90	c3bgdB_	Alignment	not modelled	5.6	19	PDB header: transferase Chain: B: PDB Molecule: thiopurine s-methyltransferase; PDBTitle: thiopurine s-methyltransferase
91	c3zqpB_	Alignment	not modelled	5.5	23	PDB header: dna-binding protein Chain: B: PDB Molecule: terminase small subunit; PDBTitle: crystal structure of the small terminase oligomerization2 domain from a spp1-like bacteriophage
92	d1eg3a2	Alignment	not modelled	5.4	60	Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
93	c1z5xU_	Alignment	not modelled	5.4	20	PDB header: hormone/growth factor receptor Chain: U: PDB Molecule: ultraspiracle protein (usp) a homologue of rxr; PDBTitle: hemipteran ecdysone receptor ligand-binding domain2 complexed with ponasterone a
94	d1thma_	Alignment	not modelled	5.4	25	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
95	c3c18B_	Alignment	not modelled	5.3	14	PDB header: transferase Chain: B: PDB Molecule: nucleotidyltransferase-like protein; PDBTitle: crystal structure of nucleotidyltransferase-like protein2 (zp_00538802.1) from exiguobacterium sibiricum 255-15 at 1.90 a3 resolution
96	c2eamA_	Alignment	not modelled	5.3	13	PDB header: signaling protein Chain: A: PDB Molecule: putative 47 kda protein; PDBTitle: solution structure of the n-terminal sam-domain of a human2 putative 47 kda protein
97	c2khqA_	Alignment	not modelled	5.3	10	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: solution nmr structure of a phage integrase ssp19472 fragment 59-159 from staphylococcus saprophyticus,3 northeast structural genomics consortium target syr103b
98	c3lccA_	Alignment	not modelled	5.2	21	PDB header: transferase Chain: A: PDB Molecule: putative methyl chloride transferase; PDBTitle: structure of a sam-dependent halide methyltransferase from arabidopsis2 thaliana
99	d1r4va_	Alignment	not modelled	5.1	21	Fold: Histone-fold Superfamily: Histone-fold Family: Bacterial histone-fold protein