
















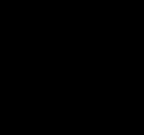

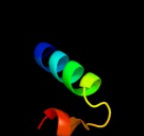

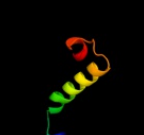
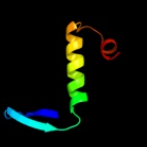
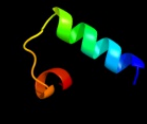

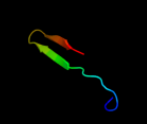







Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P76194
Date	Thu Jan 5 12:20:21 GMT 2012
Unique Job ID	70e7ba0d98ca96b6

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1mzga_	 Alignment		100.0	97	Fold: SufE/NifU Superfamily: SufE/NifU Family: SufE-like
2	d1ni7a_	 Alignment		100.0	33	Fold: SufE/NifU Superfamily: SufE/NifU Family: SufE-like
3	c1wloa_	 Alignment		100.0	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sufe protein; PDBTitle: solution structure of the hypothetical protein from thermus2 thermophilus hb8
4	d1r9pa_	 Alignment		96.2	13	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
5	d1wfza_	 Alignment		94.3	12	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
6	c2z7eB_	 Alignment		90.5	11	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	d1xjsa_	 Alignment		78.7	14	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
8	c1s2nB_	 Alignment		55.1	20	PDB header: hydrolase Chain: B: PDB Molecule: extracellular subtilisin-like serine proteinase; PDBTitle: crystal strcure of a cold adapted subtilisin-like serine proteinase
9	d1gcia_	 Alignment		54.8	21	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
10	c2b6nA_	 Alignment		53.4	20	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
11	d1r0re_	 Alignment		53.1	16	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases

12	c2iy9A_	Alignment		51.7	21	PDB header: toxin Chain: A: PDB Molecule: suba; PDBTitle: crystal structure of the a-subunit of the ab5 toxin from e.2 coli
13	c2w2qA_	Alignment		49.8	24	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	d1su0b_	Alignment		49.6	8	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
15	d1pdaa2	Alignment		45.7	29	Fold: dsRBD-like Superfamily: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain Family: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain
16	c3f7oB_	Alignment		45.6	21	PDB header: hydrolase Chain: B: PDB Molecule: serine protease; PDBTitle: crystal structure of cuticle-degrading protease from paecilomyces2 lilacinus (pl646)
17	c2oxaA_	Alignment		45.2	16	PDB header: hydrolase Chain: A: PDB Molecule: extracellular serine protease; PDBTitle: crystal structure of serine protease of aeromonas sobria
18	c2qq4A_	Alignment		45.0	15	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
19	d1p8ja2	Alignment		43.9	24	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
20	d2ixta1	Alignment		42.4	16	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
21	d1gtka2	Alignment	not modelled	41.6	29	Fold: dsRBD-like Superfamily: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain Family: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain
22	d1to2e_	Alignment	not modelled	40.4	16	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
23	d2id4a2	Alignment	not modelled	36.8	16	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
24	d1v6ca_	Alignment	not modelled	36.8	12	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
25	c1r64A_	Alignment	not modelled	33.9	16	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
26	c1p8jB_	Alignment	not modelled	32.1	24	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: furin precursor; PDBTitle: crystal structure of the proprotein convertase furin
27	d1gnsa_	Alignment	not modelled	30.5	14	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
28	d1bh6a_	Alignment	not modelled	29.7	20	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
						Fold: Skp1 dimerisation domain-like

29	d1nexa1	Alignment	not modelled	29.0	17	Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
30	c3qfhE_	Alignment	not modelled	26.5	22	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.
31	d1fs1b1	Alignment	not modelled	24.7	30	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
32	c3bpsA_	Alignment	not modelled	23.9	24	PDB header: hydrolase/lipid transport Chain: A: PDB Molecule: proprotein convertase subtilisin/kexin type 9; PDBTitle: pcsk9:egf-a complex
33	d1fs2b1	Alignment	not modelled	23.3	30	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
34	c3lpcA_	Alignment	not modelled	22.1	24	PDB header: hydrolase Chain: A: PDB Molecule: aprb2; PDBTitle: crystal structure of a subtilisin-like protease
35	c3n00A_	Alignment	not modelled	22.0	17	PDB header: transcription regulator Chain: A: PDB Molecule: rev-erba-alpha; PDBTitle: crystal structure of a deletion mutant of human reverba ligand binding2 domain bound with an ncor id1 peptide determined to 2.60a
36	c2ypnA_	Alignment	not modelled	20.0	29	PDB header: transferase Chain: A: PDB Molecule: protein (hydroxymethylbilane synthase); PDBTitle: hydroxymethylbilane synthase
37	d2olra2	Alignment	not modelled	19.1	16	Fold: PEP carboxykinase N-terminal domain Superfamily: PEP carboxykinase N-terminal domain Family: PEP carboxykinase N-terminal domain
38	d1ttha_	Alignment	not modelled	18.9	29	Fold: Anti-sigma factor AsiA Superfamily: Anti-sigma factor AsiA Family: Anti-sigma factor AsiA
39	d1ii2a2	Alignment	not modelled	17.9	22	Fold: PEP carboxykinase N-terminal domain Superfamily: PEP carboxykinase N-terminal domain Family: PEP carboxykinase N-terminal domain
40	c2yukA_	Alignment	not modelled	17.5	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
41	d2pwaa1	Alignment	not modelled	16.8	19	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
42	d2ovra1	Alignment	not modelled	16.4	30	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
43	c2gjvF_	Alignment	not modelled	15.9	15	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
44	d2gjva1	Alignment	not modelled	15.6	15	Fold: Phage tail protein-like Superfamily: Phage tail protein-like Family: STM4215-like
45	d1meeA_	Alignment	not modelled	13.5	16	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
46	d1r6va_	Alignment	not modelled	13.4	28	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
47	d2hh6a1	Alignment	not modelled	12.8	16	Fold: Left-handed superhelix Superfamily: BH3980-like Family: BH3980-like
48	c2w0gA_	Alignment	not modelled	12.0	20	PDB header: chaperone Chain: A: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: hsp90 co-chaperone cdc37
49	c1us7B_	Alignment	not modelled	10.4	20	PDB header: chaperone Chain: B: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: complex of hsp90 and p50
50	d1us7b_	Alignment	not modelled	10.4	20	Fold: Hsp90 co-chaperone CDC37 Superfamily: Hsp90 co-chaperone CDC37 Family: Hsp90 co-chaperone CDC37
51	c3gq2B_	Alignment	not modelled	10.3	11	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
52	c3lysC_	Alignment	not modelled	10.0	9	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
53	d1gm5a1	Alignment	not modelled	9.4	18	Fold: Four-helical up-and-down bundle Superfamily: RecG, N-terminal domain Family: RecG, N-terminal domain
54	d1n83a_	Alignment	not modelled	9.1	15	Fold: Nuclear receptor ligand-binding domain Superfamily: Nuclear receptor ligand-binding domain Family: Nuclear receptor ligand-binding domain
						PDB header: oxidoreductase

55	c2hl7A_	Alignment	not modelled	9.0	23	Chain: A: PDB Molecule: cytochrome c-type biogenesis protein ccmh; PDBTitle: crystal structure of the periplasmic domain of ccmh from pseudomonas2 aeruginosa
56	d1losa_	Alignment	not modelled	9.0	30	Fold: Nuclear receptor ligand-binding domain Superfamily: Nuclear receptor ligand-binding domain Family: Nuclear receptor ligand-binding domain
57	c3t41B_	Alignment	not modelled	8.2	21	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
58	c2w3cA_	Alignment	not modelled	8.0	11	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
59	d1vdda_	Alignment	not modelled	7.7	26	Fold: Recombination protein RecR Superfamily: Recombination protein RecR Family: Recombination protein RecR
60	c2kvhA_	Alignment	not modelled	7.1	39	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
61	c3e21A_	Alignment	not modelled	7.0	32	PDB header: apoptosis Chain: A: PDB Molecule: fas-associated factor 1; PDBTitle: crystal structure of faf-1 uba domain
62	c3eq1A_	Alignment	not modelled	6.9	26	PDB header: transferase Chain: A: PDB Molecule: porphobilinogen deaminase; PDBTitle: the crystal structure of human porphobilinogen deaminase at2 2.8a resolution
63	d1pq9a_	Alignment	not modelled	6.9	12	Fold: Nuclear receptor ligand-binding domain Superfamily: Nuclear receptor ligand-binding domain Family: Nuclear receptor ligand-binding domain
64	c2kykA_	Alignment	not modelled	6.8	25	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
65	c2hc4A_	Alignment	not modelled	6.7	15	PDB header: gene regulation Chain: A: PDB Molecule: vitamin d receptor; PDBTitle: crystal structure of the lbd of vdr of danio rerio in2 complex with calcitriol
66	d1t7ra_	Alignment	not modelled	6.7	15	Fold: Nuclear receptor ligand-binding domain Superfamily: Nuclear receptor ligand-binding domain Family: Nuclear receptor ligand-binding domain
67	c3i74B_	Alignment	not modelled	6.4	20	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
68	c3dmbA_	Alignment	not modelled	6.4	18	PDB header: oxidoreductase Chain: A: PDB Molecule: putative general stress protein 26 with a prp-oxidase like PDBTitle: crystal structure of a putative general stress family protein2 (xcc2264) from xanthomonas campestris pv. campestris at 2.30 a3 resolution
69	c3c18B_	Alignment	not modelled	6.4	10	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
70	d1fpoa1	Alignment	not modelled	6.3	8	Fold: Long alpha-hairpin Superfamily: Chaperone J-domain Family: Chaperone J-domain
71	d1x40a1	Alignment	not modelled	6.2	22	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
72	c2dl0A_	Alignment	not modelled	6.2	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
73	d1coka_	Alignment	not modelled	6.1	15	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
74	d1dbia_	Alignment	not modelled	5.9	21	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
75	c2kg5A_	Alignment	not modelled	5.6	28	PDB header: signaling protein Chain: A: PDB Molecule: arf-gap, rho-gap domain, ank repeat and ph PDBTitle: nmr solution structure of arap3-sam
76	c3zqpB_	Alignment	not modelled	5.6	13	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
77	c1z5xE_	Alignment	not modelled	5.5	21	PDB header: hormone/growth factor receptor Chain: E: PDB Molecule: ecdysone receptor ligand binding domain; PDBTitle: hemipteran ecdysone receptor ligand-binding domain2 complexed with ponasterone a
78	c2eamA_	Alignment	not modelled	5.5	18	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 PDB header: nuclear receptor

79	c3lbdA_	Alignment	not modelled	5.4	18	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
80	c2qcfA_	Alignment	not modelled	5.2	11	PDB header: hormone/growth factor Chain: A: PDB Molecule: estrogen receptor; PDBTitle: human estrogen receptor alpha ligand-binding domain in complex with2 estradiol and the e2#23 fn3 monobody
81	c2kw0A_	Alignment	not modelled	5.1	27	PDB header: oxidoreductase Chain: A: PDB Molecule: ccmh protein; PDBTitle: solution structure of n-terminal domain of ccmh from escherichia.coli