

Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P37056
Date	Thu Jan 5 11:54:44 GMT 2012
Unique Job ID	c90189a776958132

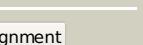
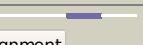
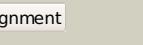
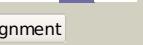
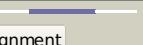
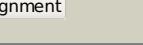
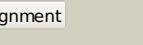
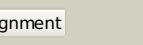
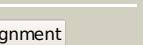
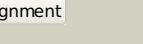
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3kw0D_			99.9	27	PDB header: hydrolase Chain: D: PDB Molecule: cysteine peptidase; PDBTitle: crystal structure of cysteine peptidase (np_982244.1) from bacillus2 cereus atcc 10987 at 2.50 a resolution
2	c2fg0B_			99.9	20	PDB header: hydrolase Chain: B: PDB Molecule: cog0791: cell wall-associated hydrolases (invasion- PDBTitle: crystal structure of a putative gamma-d-glutamyl-l-diamino acid2 endopeptidase (npun_r0659) from nostoc punctiforme pcc 73102 at 1.793 a resolution
3	d2if6a1			99.9	28	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: YiiX-like
4	d2evra2			99.9	21	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: NlpC/P60
5	c2xivA_			99.9	23	PDB header: structural protein Chain: A: PDB Molecule: hypothetical invasion protein; PDBTitle: structure of rv1477, hypothetical invasion protein of2 mycobacterium tuberculosis
6	c3npfB_			99.9	19	PDB header: hydrolase Chain: B: PDB Molecule: putative dipeptidyl-peptidase vi; PDBTitle: crystal structure of a putative dipeptidyl-peptidase vi (bacova_00612)2 from bacteroides ovatus at 1.72 a resolution
7	c3pb1A_			99.9	25	PDB header: hydrolase Chain: A: PDB Molecule: invasion protein; PDBTitle: structure of the peptidoglycan hydrolase ripb (rv1478) from2 mycobacterium tuberculosis at 1.6 resolution
8	c3h41A_			99.9	19	PDB header: hydrolase Chain: A: PDB Molecule: nlp/p60 family protein; PDBTitle: crystal structure of a nlp/p60 family protein (bce_2878) from2 bacillus cereus atcc 10987 at 1.79 a resolution
9	c3gt2A_			99.9	25	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of the p60 domain from m. avium2 paratuberculosis antigen map1272c
10	c2k1gA_			99.9	21	PDB header: lipoprotein Chain: A: PDB Molecule: lipoprotein spr; PDBTitle: solution nmr structure of lipoprotein spr from escherichia coli k12.2 northeast structural genomics target er541-37-162
11	c3i86A_			99.8	24	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of the p60 domain from m. avium subspecies2 paratuberculosis antigen map1204

12	c3m1uB			99.5	18	PDB header: hydrolase Chain: B: PDB Molecule: putative gamma-d-glutamyl-l-diamino acid endopeptidase; PDBTitle: crystal structure of a putative gamma-d-glutamyl-l-diamino acid2 endopeptidase (dvu_0896) from desulfobivrio vulgaris hildenborough at 3.75 a resolution
13	c2p1gA			98.9	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative xylanase; PDBTitle: crystal structure of a putative xylanase from bacteroides fragilis
14	c2kytA			98.5	26	PDB header: hydrolase Chain: A: PDB Molecule: group xvi phospholipase a2; PDBTitle: solution struture of the h-rev107 n-terminal domain
15	d2im9a1			95.7	17	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Lpg0564-like
16	c21m9A			95.7	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of protein lpg0564 from legionella pneumophila str.2 philadelphia 1, pfam duf1460
17	d2io8a2			63.9	36	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: CHAP domain
18	d1wpga1			50.0	29	Fold: Double-stranded beta-helix Superfamily: Calcium ATPase, transduction domain A Family: Calcium ATPase, transduction domain A
19	c2hc8A			43.0	9	PDB header: transport protein Chain: A: PDB Molecule: cation-transporting atpase, p-type; PDBTitle: structure of the a. fulgidus copa a-domain
20	d1o9ya			41.7	25	Fold: Surface presentation of antigens (SPOA) Superfamily: Surface presentation of antigens (SPOA) Family: Surface presentation of antigens (SPOA)
21	c3kopB		not modelled	40.0	33	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of protein with a cyclophilin-like fold2 (yp_831253.1) from arthrobacter sp. fb24 at 1.90 a resolution
22	c3b8eC		not modelled	39.2	20	PDB header: hydrolase/transport protein Chain: C: PDB Molecule: sodium/potassium-transporting atpase subunit PDBTitle: crystal structure of the sodium-potassium pump
23	d1gta1		not modelled	37.5	16	Fold: FAH Superfamily: FAH Family: FAH
24	c3nnlB		not modelled	37.4	23	PDB header: biosynthetic protein Chain: B: PDB Molecule: cura; PDBTitle: halogenase domain from cura module (crystal form iii)
25	c3b9bA		not modelled	36.8	30	PDB header: hydrolase Chain: A: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: structure of the e2 beryllium fluoride complex of the serca2 ca2+-atpase
26	d2evra1		not modelled	36.3	23	Fold: SH3-like barrel Superfamily: Prokaryotic SH3-related domain Family: Spr N-terminal domain-like
27	c3j08A		not modelled	36.3	9	PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa
28	d2z1ea2		not modelled	35.7	24	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like

29	d1ixda	Alignment	not modelled	34.0	11	Fold: SH3-like barrel Superfamily: Cap-Gly domain Family: Cap-Gly domain
30	c2vpmB	Alignment	not modelled	32.8	25	PDB header: ligase Chain: B: PDB Molecule: trypanothione synthetase; PDBTitle: trypanothione synthetase
31	c2kijA	Alignment	not modelled	31.7	18	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1; PDBTitle: solution structure of the actuator domain of the copper-2 transporting atpase atp7a
32	d2jfga2	Alignment	not modelled	31.1	38	Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: MurCDEF C-terminal domain
33	d1we3o	Alignment	not modelled	30.5	20	Fold: GroES-like Superfamily: GroES-like Family: GroES
34	d2zoda2	Alignment	not modelled	30.1	29	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like
35	d2gbsa1	Alignment	not modelled	29.9	27	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
36	d2ngra2	Alignment	not modelled	29.9	14	Fold: MoeA N-terminal region -like Superfamily: MoeA N-terminal region -like Family: MoeA N-terminal region -like
37	c3qdfa	Alignment	not modelled	29.7	29	PDB header: isomerase Chain: A: PDB Molecule: 2-hydroxyhepta-2,4-diene-1,7-dioate isomerase; PDBTitle: crystal structure of 2-hydroxyhepta-2,4-diene-1,7-dioate isomerase2 from mycobacterium marinum
38	c1mhsA	Alignment	not modelled	29.4	30	PDB header: membrane protein, proton transport Chain: A: PDB Molecule: plasma membrane atpase; PDBTitle: model of neurospora crassa proton atpase
39	d2eyqa1	Alignment	not modelled	29.1	26	Fold: SH3-like barrel Superfamily: CardD-like Family: CardD-like
40	c3j09A	Alignment	not modelled	28.8	9	PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa
41	c1i7oC	Alignment	not modelled	28.6	16	PDB header: isomerase, lyase Chain: C: PDB Molecule: 4-hydroxyphenylacetate degradation bifunctional PDBTitle: crystal structure of hpce
42	c2q1dX	Alignment	not modelled	27.9	22	PDB header: lyase Chain: X: PDB Molecule: 2-keto-3-deoxy-d-arabinonate dehydratase; PDBTitle: 2-keto-3-deoxy-d-arabinonate dehydratase complexed with magnesium and 2,2,5-dioxopentanoate
43	c3ixzA	Alignment	not modelled	27.7	23	PDB header: hydrolase Chain: A: PDB Molecule: potassium-transporting atpase alpha; PDBTitle: pig gastric h+/k+-atpase complexed with aluminium fluoride
44	c3mvnA	Alignment	not modelled	27.7	28	PDB header: ligase Chain: A: PDB Molecule: udp-n-acetyl muramate:l-alanyl-gamma-d-glutamyl-meno- PDBTitle: crystal structure of a domain from a putative udp-n-acetyl muramate:l-2 alanyl-gamma-d-glutamyl-meno-diaminopimelate ligase from haemophilus3 ducreyi 35000hp
45	c3b8cB	Alignment	not modelled	27.6	21	PDB header: hydrolase Chain: B: PDB Molecule: atpase 2, plasma membrane-type; PDBTitle: crystal structure of a plasma membrane proton pump
46	c2zxeA	Alignment	not modelled	27.1	20	PDB header: hydrolase/transport protein Chain: A: PDB Molecule: na, k-atpase alpha subunit; PDBTitle: crystal structure of the sodium - potassium pump in the e2.2k+,pi2 state
47	c2kbzA	Alignment	not modelled	26.8	23	PDB header: viral protein Chain: A: PDB Molecule: 15 protein (bacteriophage spp1 complete PDBTitle: nmr structure of protein gp15 of bacteriophage spp1
48	d1y7ma2	Alignment	not modelled	26.0	8	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
49	d1ltqa1	Alignment	not modelled	26.0	22	Fold: HAD-like Superfamily: HAD-like Family: phosphatase domain of polynucleotide kinase
50	d1uz5a2	Alignment	not modelled	25.7	20	Fold: MoeA N-terminal region -like Superfamily: MoeA N-terminal region -like Family: MoeA N-terminal region -like
51	d1nkqa	Alignment	not modelled	25.6	22	Fold: FAH Superfamily: FAH Family: FAH
52	c2ioaA	Alignment	not modelled	24.8	32	PDB header: ligase, hydrolase Chain: A: PDB Molecule: bifunctional glutathionylspermidine PDBTitle: e. coli bifunctional glutathionylspermidine2 synthetase/amidase incomplex with mg2+ and adp and3 phosphinate inhibitor
53	d2ftsa2	Alignment	not modelled	24.6	20	Fold: MoeA N-terminal region -like Superfamily: MoeA N-terminal region -like Family: MoeA N-terminal region -like
54	d1aono	Alignment	not modelled	24.2	11	Fold: GroES-like Superfamily: GroES-like Family: GroES

55	d1hyo2	Alignment	not modelled	23.4	54	Fold: FAH Superfamily: FAH Family: FAH
56	d1vrb1	Alignment	not modelled	23.4	27	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Asparaginyl hydroxylase-like
57	d1k20a_	Alignment	not modelled	23.1	18	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
58	d2fcta1	Alignment	not modelled	22.8	23	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: PhyH-like
59	d1p3ha_	Alignment	not modelled	22.7	23	Fold: GroES-like Superfamily: GroES-like Family: GroES
60	d3c9ua2	Alignment	not modelled	22.0	21	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like
61	d1zcea1	Alignment	not modelled	21.8	36	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
62	d1khia1	Alignment	not modelled	21.7	20	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: elF5a N-terminal domain-like
63	c3rfuC_	Alignment	not modelled	20.9	19	PDB header: hydrolase, membrane protein Chain: C: PDB Molecule: copper efflux atpase; PDBTitle: crystal structure of a copper-transporting pib-type atpase
64	d2ar1a1	Alignment	not modelled	20.8	14	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
65	d1gta2	Alignment	not modelled	20.7	31	Fold: FAH Superfamily: FAH Family: FAH
66	d1c0aa2	Alignment	not modelled	19.8	30	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
67	c1wzoC_	Alignment	not modelled	19.7	23	PDB header: isomerase Chain: C: PDB Molecule: hpce; PDBTitle: crystal structure of the hpce from thermus thermophilus hb8
68	d1l0wa2	Alignment	not modelled	19.5	40	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
69	d1jr7a_	Alignment	not modelled	19.1	18	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Gab protein (hypothetical protein YgaT)
70	c2wbqA_	Alignment	not modelled	18.8	36	PDB header: oxidoreductase Chain: A: PDB Molecule: l-arginine beta-hydroxylase; PDBTitle: crystal structure of vioc in complex with (2S,3S)-2 hydroxyarginine
71	d1in0a1	Alignment	not modelled	18.4	23	Fold: Ferredoxin-like Superfamily: YajQ-like Family: YajQ-like
72	d1e8ca2	Alignment	not modelled	18.2	20	Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: MurCDEF C-terminal domain
73	c2nqqA_	Alignment	not modelled	17.7	17	PDB header: biosynthetic protein Chain: A: PDB Molecule: molybdopterin biosynthesis protein moea; PDBTitle: moea r137q
74	c3fd5B_	Alignment	not modelled	17.6	25	PDB header: transferase Chain: B: PDB Molecule: selenide, water dikinase 1; PDBTitle: crystal structure of human selenophosphate synthetase 12 complex with ampcp
75	d1sawa_	Alignment	not modelled	17.6	26	Fold: FAH Superfamily: FAH Family: FAH
76	d2g2xa1	Alignment	not modelled	17.0	25	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
77	c2l8ka_	Alignment	not modelled	16.9	21	PDB header: viral protein Chain: A: PDB Molecule: non-structural protein 7; PDBTitle: nmr structure of the arterivirus nonstructural protein 7 alpha (ns72 alpha)
78	c2nnzA_	Alignment	not modelled	16.5	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: solution structure of the hypothetical protein af2241 from2 archaeoglobus fulgidus
79	c2og5A_	Alignment	not modelled	16.5	33	PDB header: oxidoreductase Chain: A: PDB Molecule: putative oxygenase; PDBTitle: crystal structure of asparagine oxygenase (asno)
80	d1ds1a_	Alignment	not modelled	16.5	55	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Clavaminate synthase
81	c3lzkC_	Alignment	not modelled	16.4	23	PDB header: hydrolase Chain: C: PDB Molecule: fumarylacetate hydrolase family protein; PDBTitle: the crystal structure of a probably aromatic amino acid2 degradation protein from sinorhizobium meliloti 1021

82	d1foea2		Alignment	not modelled	16.3	38	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
83	d1o6aa_		Alignment	not modelled	16.1	7	Fold: Surface presentation of antigens (SPOA) Superfamily: Surface presentation of antigens (SPOA) Family: Surface presentation of antigens (SPOA)
84	c1hyoB_		Alignment	not modelled	16.1	54	PDB header: hydrolase Chain: B: PDB Molecule: fumarylacetoacetate hydrolase; PDBTitle: crystal structure of fumarylacetoacetate hydrolase2 complexed with 4-(hydroxymethylphosphinoyl)-3-oxo-butanic3 acid
85	d1njb1		Alignment	not modelled	16.1	19	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
86	d2hawa1		Alignment	not modelled	16.0	0	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
87	d1koha2		Alignment	not modelled	15.9	13	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Non-canonical RBD domain
88	d1knwa1		Alignment	not modelled	15.9	36	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
89	d1clia2		Alignment	not modelled	15.8	21	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like
90	d2evea1		Alignment	not modelled	15.7	24	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
91	c3ebrA_		Alignment	not modelled	15.6	7	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized rmlc-like cupin; PDBTitle: crystal structure of an rmlc-like cupin protein (reut_a0381) from2 ralstonia eutropha jmp134 at 2.60 a resolution
92	d1f3ta1		Alignment	not modelled	15.4	11	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
93	c1khIA_		Alignment	not modelled	15.3	19	PDB header: structural protein Chain: A: PDB Molecule: hex1; PDBTitle: crystal structure of hex1
94	d1g8aa_		Alignment	not modelled	15.1	17	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Fibrillarin homologue
95	c3I53F_		Alignment	not modelled	15.1	31	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: putative fumarylacetoacetate isomerase/hydrolase; PDBTitle: crystal structure of a putative fumarylacetoacetate2 isomerase/hydrolase from oleispira antarctica
96	c3al6A_		Alignment	not modelled	14.7	26	PDB header: unknown function Chain: A: PDB Molecule: jmc domain-containing protein c2orf60; PDBTitle: crystal structure of human tyw5
97	c2x35A_		Alignment	not modelled	14.7	27	PDB header: transcription Chain: A: PDB Molecule: peregrin; PDBTitle: molecular basis of histone h3k36me3 recognition by the pwwp2 domain of brpf1.
98	c2dfuB_		Alignment	not modelled	14.7	26	PDB header: isomerase Chain: B: PDB Molecule: probable 2-hydroxyhepta-2,4-diene-1,7-dioate isomerase; PDBTitle: crystal structure of the 2-hydroxyhepta-2,4-diene-1,7-dioate isomerase2 from thermus thermophilus hb8
99	c3IkxA_		Alignment	not modelled	14.6	17	PDB header: chaperone Chain: A: PDB Molecule: transcription factor btf3; PDBTitle: human nac dimerization domain