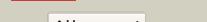
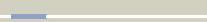


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P16095
Date	Thu Jan 5 11:35:01 GMT 2012
Unique Job ID	e368a897f2be2926

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2iafa1	 Alignment		100.0	43	Fold: FwdE/GAPDH domain-like Superfamily: Serine metabolism enzymes domain Family: Serine dehydratase beta chain-like
2	c1ygyA_	 Alignment		99.6	17	PDB header: oxidoreductase Chain: A: PDB Molecule: d-3-phosphoglycerate dehydrogenase; PDBTitle: crystal structure of d-3-phosphoglycerate dehydrogenase from 2 mycobacterium tuberculosis
3	d1ygya4	 Alignment		99.3	18	Fold: FwdE/GAPDH domain-like Superfamily: Serine metabolism enzymes domain Family: SerA intervening domain-like
4	d1szqa_	 Alignment		97.6	17	Fold: 2-methylcitrate dehydratase PrpD Superfamily: 2-methylcitrate dehydratase PrpD Family: 2-methylcitrate dehydratase PrpD
5	c2hp0A_	 Alignment		97.6	15	PDB header: isomerase Chain: A: PDB Molecule: ids-epimerase; PDBTitle: crystal structure of iminodisuccinate epimerase
6	c3u4gA_	 Alignment		51.7	38	PDB header: transferase Chain: A: PDB Molecule: namn:dmb phosphoribosyltransferase; PDBTitle: the structure of cobt from pyrococcus horikoshii
7	c3s1sA_	 Alignment		51.3	31	PDB header: hydrolase, transferase Chain: A: PDB Molecule: restriction endonuclease bpsi; PDBTitle: characterization and crystal structure of the type iig restriction2 endonuclease bpsi
8	d2i7na2	 Alignment		31.7	21	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Fumble-like
9	c2rkBE_	 Alignment		29.4	24	PDB header: lyase Chain: E: PDB Molecule: serine dehydratase-like; PDBTitle: serine dehydratase like-1 from human cancer cells
10	d1rypa_	 Alignment		29.3	11	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Proteasome subunits
11	d1no5a_	 Alignment		26.0	22	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase

12	d1ug2a			24.5	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
13	d1g5ta			24.4	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
14	c1knyA			21.0	26	PDB header: transferase Chain: A: PDB Molecule: kanamycin nucleotidyltransferase; PDBTitle: kanamycin nucleotidyltransferase
15	c2kelB			20.7	26	PDB header: transcription repressor Chain: B: PDB Molecule: uncharacterized protein 56b; PDBTitle: structure of the transcription regulator svtr from the2 hyperthermophilic archaeal virus sirv1
16	d1g64b			19.4	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
17	c3ugsB			19.2	20	PDB header: transferase Chain: B: PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: crystal structure of a probable undecaprenyl diphosphate synthase2 (upps) from campylobacter jejuni
18	c1yy3A			17.9	57	PDB header: isomerase Chain: A: PDB Molecule: s-adenosylmethionine:tRNA ribosyltransferase- PDBTitle: structure of s-adenosylmethionine:tRNA ribosyltransferase-2 isomerase (quea)
19	c2zfdB			16.4	22	PDB header: signaling protein/transferase Chain: B: PDB Molecule: putative uncharacterized protein t2015_90; PDBTitle: the crystal structure of plant specific calcium binding protein atcb122 in complex with the regulatory domain of atcipk14
20	d1pwfa			15.4	13	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
21	d1r85a		not modelled	14.7	15	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
22	c2k9iB		not modelled	13.9	25	PDB header: dna binding protein Chain: B: PDB Molecule: plasmid prn1, complete sequence; PDBTitle: nmr structure of plasmid copy control protein orf56 from2 sulfolobus islandicus
23	c2vfwB		not modelled	13.9	16	PDB header: transferase Chain: B: PDB Molecule: short-chain z-isoprenyl diphosphate synthetase; PDBTitle: rv1086 native
24	d1gg2g		not modelled	13.5	42	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: Transducin (heterotrimeric G protein), gamma chain Family: Transducin (heterotrimeric G protein), gamma chain
25	d1ylq1		not modelled	13.2	22	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
26	d1omwg		not modelled	12.2	42	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: Transducin (heterotrimeric G protein), gamma chain Family: Transducin (heterotrimeric G protein), gamma chain
27	d1h72c1		not modelled	12.2	31	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
28	c2cycB		not modelled	12.0	20	PDB header: ligase Chain: B: PDB Molecule: tyrosyl-tRNA synthetase; PDBTitle: crystal structure of tyrosyl-tRNA synthetase complexed with L-tyrosine2 from pyrococcus horikoshii
29	c1uc2A		not modelled	11.8	8	PDB header: hydrolase Chain: A: PDB Molecule: endo-beta-1,4-xylanase;

29	c1us2m	Alignment	not modelled	11.8	9	PDBTitle: xylanase10c (mutant e385a) from cellulibrio japonicus in2 complex with xylopentaose PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 2; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from2 burkholderia pseudomallei
30	c3sz8D	Alignment	not modelled	11.8	10	Fold: Photosystem I reaction center subunit XI, Psal Superfamily: Photosystem I reaction center subunit XI, Psal Family: Photosystem I reaction center subunit XI, Psal
31	d1jb0l	Alignment	not modelled	11.8	26	PDB header: transferase Chain: A: PDB Molecule: putative nucleotidyltransferase; PDBTitle: crystal structure of a putative nucleotidyltransferase2 (np_343093.1) from sulfolobus solfataricus at 1.40 a3 resolution
32	c2rffA	Alignment	not modelled	11.8	21	PDB header: transferase Chain: A: PDB Molecule: putative nucleotidyltransferase; PDBTitle: crystal structure of a putative nucleotidyltransferase2 (np_343093.1) from sulfolobus solfataricus at 1.40 a3 resolution
33	c1u9pA	Alignment	not modelled	11.2	13	PDB header: unknown function Chain: A: PDB Molecule: parc; PDBTitle: permuted single-chain arc
34	d1j20a1	Alignment	not modelled	11.1	24	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
35	c1k97A	Alignment	not modelled	11.0	10	PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of e. coli argininosuccinate synthetase in complex2 with aspartate and citrulline
36	d1gotg	Alignment	not modelled	10.9	25	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: Transducin (heterotrimeric G protein), gamma chain Family: Transducin (heterotrimeric G protein), gamma chain
37	c2ddhA	Alignment	not modelled	10.7	31	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: crystal structure of acyl-coa oxidase complexed with 3-oh-dodecanoate
38	d1xhmb1	Alignment	not modelled	10.6	45	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: Transducin (heterotrimeric G protein), gamma chain Family: Transducin (heterotrimeric G protein), gamma chain
39	d1fh9a	Alignment	not modelled	10.5	23	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
40	c1xhmB	Alignment	not modelled	10.5	45	PDB header: signaling protein Chain: B: PDB Molecule: guanine nucleotide-binding protein g(i)/g(s) PDBTitle: the crystal structure of a biologically active peptide2 (sigk) bound to a g protein beta:gamma heterodimer
41	d1knya2	Alignment	not modelled	10.3	26	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Kanamycin nucleotidyltransferase (KNTase), N-terminal domain
42	d1tbge	Alignment	not modelled	10.2	25	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: Transducin (heterotrimeric G protein), gamma chain Family: Transducin (heterotrimeric G protein), gamma chain
43	c2fonA	Alignment	not modelled	10.1	25	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxisomal acyl-coa oxidase 1a; PDBTitle: x-ray crystal structure of leacx1, an acyl-coa oxidase from lycopersicon esculentum (tomato)
44	c3lr6A	Alignment	not modelled	10.0	30	PDB header: structural protein Chain: A: PDB Molecule: major ampullate spidroin 1; PDBTitle: self-assembly of spider silk proteins is controlled by a ph-sensitive2 relay
45	c2dlcX	Alignment	not modelled	10.0	18	PDB header: ligase/trna Chain: X: PDB Molecule: tyrosyl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of the ternary complex of yeast tyrosyl-trna synthetase
46	d1ncfb3	Alignment	not modelled	9.9	40	Fold: TNF receptor-like Superfamily: TNF receptor-like Family: TNF receptor-like
47	d1b65a	Alignment	not modelled	9.8	20	Fold: DmpA/ArgJ-like Superfamily: DmpA/ArgJ-like Family: DmpA-like
48	d1ng7a	Alignment	not modelled	9.7	36	Fold: Soluble domain of poliovirus core protein 3a Superfamily: Soluble domain of poliovirus core protein 3a Family: Soluble domain of poliovirus core protein 3a
49	d1k61a	Alignment	not modelled	9.6	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
50	d1ee8a1	Alignment	not modelled	9.2	14	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
51	c1kh2D	Alignment	not modelled	9.1	25	PDB header: ligase Chain: D: PDB Molecule: argininosuccinate synthetase; PDBTitle: crystal structure of thermus thermophilus hb82 argininosuccinate synthetase in complex with atp
52	c3bh1A	Alignment	not modelled	9.1	28	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0371 protein dip2346; PDBTitle: crystal structure of protein dip2346 from corynebacterium diphtheriae
53	c2crnA	Alignment	not modelled	9.0	16	PDB header: immune system Chain: A: PDB Molecule: ubash3a protein; PDBTitle: solution structure of the uba domain of human ubash3a2 protein
54	c2k3qA	Alignment	not modelled	9.0	22	PDB header: structural protein Chain: A: PDB Molecule: tusp1; PDBTitle: solution structure of the n-terminal domain (tusp1-n) of the2 egg case silk from nephila antipodiana
55	d1nlna	Alignment	not modelled	8.8	19	Fold: Cysteine proteinases Superfamily: Cysteine proteinases

					Family: Adenain-like
56	d1tuxa_	Alignment	not modelled	8.6	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
57	d1fi6a_	Alignment	not modelled	8.3	Fold: EF Hand-like Superfamily: EF-hand Family: Eps15 homology domain (EH domain)
58	c1iszA_	Alignment	not modelled	8.1	PDB header: hydrolase Chain: A: PDB Molecule: endo-1,4-beta-d-xylanase; PDBTitle: crystal structure of xylanase from streptomyces2 olivaceoviridis e-86 complexed with galactose
59	d1wota_	Alignment	not modelled	8.0	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
60	c2f5xC_	Alignment	not modelled	8.0	PDB header: transport protein Chain: C: PDB Molecule: bugd; PDBTitle: structure of periplasmic binding protein bugd
61	d2nrha1	Alignment	not modelled	7.9	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: CoA-like
62	c2x3dC_	Alignment	not modelled	7.8	PDB header: unknown function Chain: C: PDB Molecule: sso6206; PDBTitle: crystal structure of sso6206 from sulfolobus solfataricus p2
63	d2raqa1	Alignment	not modelled	7.7	Fold: Ferredoxin-like Superfamily: MTH889-like Family: MTH889-like
64	d1bg4a_	Alignment	not modelled	7.7	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
65	d1k92a1	Alignment	not modelled	7.7	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
66	d1p5ja_	Alignment	not modelled	7.7	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
67	c1p5jA_	Alignment	not modelled	7.7	PDB header: lyase Chain: A: PDB Molecule: l-serine dehydratase; PDBTitle: crystal structure analysis of human serine dehydratase
68	c2fg1A_	Alignment	not modelled	7.7	PDB header: hydrolase Chain: A: PDB Molecule: alkaline thermostable endoxylanase; PDBTitle: an alkali thermostable f/10 xylanase from alkalophilic2 bacillus sp. ng-27
69	d1j6ua3	Alignment	not modelled	7.6	Fold: Ribokinase-like Superfamily: MurD-like peptide ligases, catalytic domain Family: MurCDEF
70	d1wkva1	Alignment	not modelled	7.5	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
71	d1k47a1	Alignment	not modelled	7.4	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
72	d1x2na1	Alignment	not modelled	7.3	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
73	d2gkea2	Alignment	not modelled	7.3	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: Diaminopimelate epimerase
74	c2xa0A_	Alignment	not modelled	7.3	PDB header: apoptosis Chain: A: PDB Molecule: apoptosis regulator bcl-2; PDBTitle: crystal structure of bcl-2 in complex with a bax bh3 peptide
75	d2ar0a1	Alignment	not modelled	7.2	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: N-6 DNA Methylase-like
76	d1j09a1	Alignment	not modelled	7.2	Fold: An anticodon-binding domain of class I aminoacyl-tRNA synthetases Superfamily: An anticodon-binding domain of class I aminoacyl-tRNA synthetases Family: C-terminal domain of glutamyl-tRNA synthetase (GluRS)
77	d1vl2a1	Alignment	not modelled	7.1	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
78	c1w07A_	Alignment	not modelled	7.0	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: arabidopsis thaliana acyl-coa oxidase 1
79	c3g2bA_	Alignment	not modelled	7.0	PDB header: biosynthetic protein Chain: A: PDB Molecule: coenzyme pqq synthesis protein d; PDBTitle: crystal structure of pqqd from xanthomonas campestris
80	d1vlfm2	Alignment	not modelled	6.9	Fold: Formate dehydrogenase/DMSO reductase, domains 1-3 Superfamily: Formate dehydrogenase/DMSO reductase, domains 1-3 Family: Formate dehydrogenase/DMSO reductase, domains 1-3
					Fold: TNF receptor-like

81	d1exta3	Alignment	not modelled	6.9	40	Superfamily: TNF receptor-like Family: TNF receptor-like
82	d2r5yb1	Alignment	not modelled	6.9	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
83	c2jyaA	Alignment	not modelled	6.9	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu1810; PDBTitle: nmr solution structure of protein atu1810 from agrobacterium2 tumefaciens. northeast structural genomics consortium target atr23,3 ontario centre for structural proteomics target atc1776
84	c3ibqA	Alignment	not modelled	6.7	24	PDB header: transferase Chain: A: PDB Molecule: pyridoxal kinase; PDBTitle: crystal structure of pyridoxal kinase from lactobacillus2 plantarum in complex with atp
85	d1uf2a	Alignment	not modelled	6.7	36	Fold: Reovirus inner layer core protein p3 Superfamily: Reovirus inner layer core protein p3 Family: Phytoreovirus core
86	cluf2A	Alignment	not modelled	6.7	36	PDB header: virus Chain: A: PDB Molecule: core protein p3; PDBTitle: the atomic structure of rice dwarf virus (rdv)
87	d1yrbn	Alignment	not modelled	6.7	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
88	c2fkka	Alignment	not modelled	6.6	25	PDB header: viral protein Chain: A: PDB Molecule: baseplate structural protein gp10; PDBTitle: crystal structure of the c-terminal domain of the bacteriophage t42 gene product 10
89	c2j5bA	Alignment	not modelled	6.5	15	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-tRNA synthetase; PDBTitle: structure of the tyrosyl tRNA synthetase from acanthamoeba2 polyphaga mimivirus complexed with tyrosynol
90	c1qoyA	Alignment	not modelled	6.5	12	PDB header: toxin Chain: A: PDB Molecule: hemolysin e; PDBTitle: e.coli hemolysin e (hlye, clya, shea)
91	c1pprO	Alignment	not modelled	6.5	11	PDB header: light-harvesting protein Chain: O: PDB Molecule: peridinin-chlorophyll protein; PDBTitle: peridinin-chlorophyll-protein of amphidinium carterae
92	c2jugB	Alignment	not modelled	6.5	39	PDB header: biosynthetic protein Chain: B: PDB Molecule: tubc protein; PDBTitle: multienzyme docking in hybrid megasynthetas
93	d1us3a2	Alignment	not modelled	6.4	8	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
94	c2gefA	Alignment	not modelled	6.4	50	PDB header: hydrolase Chain: A: PDB Molecule: protease vp4; PDBTitle: crystal structure of a novel viral protease with a2 serine/lysine catalytic dyad mechanism
95	d1p3da3	Alignment	not modelled	6.4	26	Fold: Ribokinase-like Superfamily: MurD-like peptide ligases, catalytic domain Family: MurCDEF
96	c3l0zC	Alignment	not modelled	6.4	19	PDB header: transferase Chain: C: PDB Molecule: putative nicotinate-nucleotide-dimethylbenzimidazole PDBTitle: crystal structure of a putative nicotinate-nucleotide-2 dimethylbenzimidazole phosphoribosyltransferase from3 methanococcus jannaschii dsm 2661
97	c2ci8A	Alignment	not modelled	6.3	9	PDB header: translation Chain: A: PDB Molecule: cytoplasmic protein nck1; PDBTitle: sh2 domain of human nck1 adaptor protein - uncomplexed
98	c3khkA	Alignment	not modelled	6.3	23	PDB header: dna binding protein Chain: A: PDB Molecule: type i restriction-modification system PDBTitle: crystal structure of type-i restriction-modification system2 methylation subunit (mm_0429) from methanosaarchina maezi.
99	c2dagA	Alignment	not modelled	6.3	13	PDB header: hydrolase Chain: A: PDB Molecule: ubiquitin carboxyl-terminal hydrolase 5; PDBTitle: solution structure of the first uba domain in the human2 ubiquitin specific protease 5 (isopeptidase 5)