

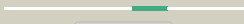


















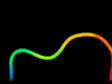


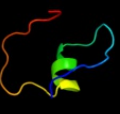








Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P28306
Date	Wed Jan 25 15:20:47 GMT 2012
Unique Job ID	1cb4d13787e39254

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2r1fB_	 Alignment		100.0	97	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: predicted aminodeoxychorismate lyase; PDBTitle: crystal structure of predicted aminodeoxychorismate lyase from <i>Escherichia coli</i>
2	d3bz6a1	 Alignment		45.6	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PSPT02686-like
3	c2v3sB_	 Alignment		44.5	7	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase osr1; PDBTitle: structural insights into the recognition of substrates and 2 activators by the osr1 kinase
4	d1l0wa2	 Alignment		38.3	29	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
5	d1gjj2	 Alignment		36.9	25	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain
6	c3r85E_	 Alignment		34.5	40	PDB header: apoptosis Chain: E: PDB Molecule: heme-binding protein 2; PDBTitle: crystal structure of human bcl-2 domain in complex with bcl-xl
7	d1eg7a_	 Alignment		34.4	33	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
8	d1h9fa_	 Alignment		33.9	21	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain
9	d1ztwa1	 Alignment		33.3	16	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Reverse transcriptase
10	c3bz6A_	 Alignment		33.1	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0502 protein pspt_2686; PDBTitle: crystal structure of a conserved protein of unknown function from <i>Pseudomonas syringae</i> pv. tomato str. dc3000
11	d1jeia_	 Alignment		32.5	29	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain

12	c3r85G_	Alignment		32.1	40	PDB header: apoptosis Chain: G: PDB Molecule: heme-binding protein 2; PDBTitle: crystal structure of human soul bh3 domain in complex with bcl-xl
13	d1e0ga_	Alignment		29.6	10	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
14	d2fug13	Alignment		26.9	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: Nqo1 middle domain-like Family: Nqo1 middle domain-like
15	c2exuA_	Alignment		26.7	20	PDB header: transcription Chain: A: PDB Molecule: transcription initiation protein spt4/spt5; PDBTitle: crystal structure of saccharomyces cerevisiae transcription elongation2 factors spt4-spt5nqn domain
16	c3do6B_	Alignment		26.2	29	PDB header: ligase Chain: B: PDB Molecule: formate--tetrahydrofolate ligase; PDBTitle: crystal structure of putative formyltetrahydrofolate2 synthetase (tm1766) from thermotoga maritima at 1.85 a3 resolution
17	c3r85F_	Alignment		26.2	41	PDB header: apoptosis Chain: F: PDB Molecule: heme-binding protein 2; PDBTitle: crystal structure of human soul bh3 domain in complex with bcl-xl
18	c1qjiA_	Alignment		25.8	57	PDB header: membrane protein Chain: A: PDB Molecule: lap2; PDBTitle: n-terminal constant region of the nuclear envelope protein2 lap2
19	c3lk2B_	Alignment		25.2	16	PDB header: protein binding Chain: B: PDB Molecule: f-actin-capping protein subunit beta isoforms 1 and 2; PDBTitle: crystal structure of capz bound to the uncapping motif from carmil
20	c3fl1H_	Alignment		24.6	30	PDB header: protein binding Chain: H: PDB Molecule: hepatocyte growth factor-regulated tyrosine kinase PDBTitle: human escrt-0 core complex
21	c2zktB_	Alignment	not modelled	23.7	19	PDB header: isomerase Chain: B: PDB Molecule: 2,3-bisphosphoglycerate-independent phosphoglycerate PDBTitle: structure of ph0037 protein from pyrococcus horikoshii
22	d1wxqa2	Alignment	not modelled	23.1	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: G domain-linked domain
23	c2dhkA_	Alignment	not modelled	20.6	8	PDB header: immune system Chain: A: PDB Molecule: tbc1 domain family member 2; PDBTitle: solution structure of the ph domain of tbc1 domain family2 member 2 protein from human
24	c3r85H_	Alignment	not modelled	18.8	39	PDB header: apoptosis Chain: H: PDB Molecule: heme-binding protein 2; PDBTitle: crystal structure of human soul bh3 domain in complex with bcl-xl
25	c3lwfD_	Alignment	not modelled	18.3	15	PDB header: transcription regulator Chain: D: PDB Molecule: putative transcriptional regulator; PDBTitle: crystal structure of putative transcriptional regulator (np_470886.1)2 from listeria innocua at 2.06 a resolution
26	c2yztA_	Alignment	not modelled	17.8	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative uncharacterized protein ttha1756; PDBTitle: crystal structure of uncharacterized conserved protein from thermus2 thermophilus hb8
27	d2zd1b1	Alignment	not modelled	16.1	15	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Reverse transcriptase
28	c3fwlA_	Alignment	not modelled	15.9	11	PDB header: transferase, hydrolase Chain: A: PDB Molecule: penicillin-binding protein 1b; PDBTitle: crystal structure of the full-length transglycosylase pbp1b2 from escherichia coli

29	dlhara_	Alignment	not modelled	14.2	15	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Reverse transcriptase
30	d2ysca1	Alignment	not modelled	13.8	100	Fold: WW domain-like Superfamily: WW domain Family: WW domain
31	dlnr6a_	Alignment	not modelled	12.8	56	Fold: Cytochrome P450 Superfamily: Cytochrome P450 Family: Cytochrome P450
32	c3e4eA_	Alignment	not modelled	11.8	56	PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome p450 2e1; PDBTitle: human cytochrome p450 2e1 in complex with the inhibitor 4-2 methylpyrazole
33	d1dt9a3	Alignment	not modelled	10.9	9	Fold: N-terminal domain of eukaryotic peptide chain release factor subunit 1, ERF1 Superfamily: N-terminal domain of eukaryotic peptide chain release factor subunit 1, ERF1 Family: N-terminal domain of eukaryotic peptide chain release factor subunit 1, ERF1
34	c2k9xA_	Alignment	not modelled	10.7	14	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of urm1 from trypanosoma brucei
35	d1oqla_	Alignment	not modelled	10.4	41	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Hypothetical protein YesU
36	c2h8kA_	Alignment	not modelled	10.4	14	PDB header: transferase Chain: A: PDB Molecule: sult1c3 splice variant d; PDBTitle: human sulfotranferase sult1c3 in complex with pap
37	c2ps3A_	Alignment	not modelled	9.9	7	PDB header: metal transport Chain: A: PDB Molecule: high-affinity zinc uptake system protein znua; PDBTitle: structure and metal binding properties of znua, a2 periplasmic zinc transporter from escherichia coli
38	d1ujpa_	Alignment	not modelled	9.5	18	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phoshate binding barrel Family: Tryptophan biosynthesis enzymes
39	c3ed4A_	Alignment	not modelled	9.5	23	PDB header: transferase Chain: A: PDB Molecule: arylsulfatase; PDBTitle: crystal structure of putative arylsulfatase from escherichia coli
40	clezjA_	Alignment	not modelled	9.5	12	PDB header: viral protein, transferase Chain: A: PDB Molecule: nucleocapsid phosphoprotein; PDBTitle: crystal structure of the multimerization domain of the phosphoprotein2 from sendai virus
41	d1plsa_	Alignment	not modelled	9.5	21	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
42	c1d0rA_	Alignment	not modelled	9.2	13	PDB header: hormone/growth factor Chain: A: PDB Molecule: glucagon-like peptide-1-(7-36)-amide; PDBTitle: solution structure of glucagon-like peptide-1-(7-36)-amide2 in trifluoroethanol/water
43	c2qieB_	Alignment	not modelled	9.2	12	PDB header: transferase Chain: B: PDB Molecule: molybdopterin synthase small subunit; PDBTitle: staphylococcus aureus molybdopterin synthase in complex2 with precursor z
44	c1us7B_	Alignment	not modelled	9.2	14	PDB header: chaperone Chain: B: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: complex of hsp90 and p50
45	d1us7b_	Alignment	not modelled	9.2	14	Fold: Hsp90 co-chaperone CDC37 Superfamily: Hsp90 co-chaperone CDC37 Family: Hsp90 co-chaperone CDC37
46	d1vjka_	Alignment	not modelled	8.8	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: MoaD
47	c3f5fA_	Alignment	not modelled	8.7	14	PDB header: transport, transferase Chain: A: PDB Molecule: maltose-binding periplasmic protein, heparan PDBTitle: crystal structure of heparan sulfate 2-o-sulfotransferase2 from gallus gallus as a maltose binding protein fusion.
48	d1rd5a_	Alignment	not modelled	8.6	18	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phoshate binding barrel Family: Tryptophan biosynthesis enzymes
49	c3b5qB_	Alignment	not modelled	8.5	18	PDB header: hydrolase Chain: B: PDB Molecule: putative sulfatase yidj; PDBTitle: crystal structure of a putative sulfatase (np_810509.1)2 from bacteroides thetaiotaomicron vpi-5482 at 2.40 a3 resolution
50	c3s2wB_	Alignment	not modelled	8.5	7	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: the crystal structure of a marr transcriptional regulator from2 methanosarcina mazei go1
51	d1c0aa2	Alignment	not modelled	8.4	13	Fold: DcoH-like Superfamily: GAD domain-like Family: GAD domain
52	d1seia_	Alignment	not modelled	8.3	10	Fold: Ribosomal protein S8 Superfamily: Ribosomal protein S8 Family: Ribosomal protein S8
53	c3szzA_	Alignment	not modelled	8.3	15	PDB header: hydrolase Chain: A: PDB Molecule: phosphonoacetate hydrolase; PDBTitle: crystal structure of phosphonoacetate hydrolase from sinorhizobium2 meliloti 1021 in complex with acetate
54	c3po0A_	Alignment	not modelled	8.2	4	PDB header: protein binding Chain: A: PDB Molecule: small archaeal modifier protein 1;

						PDBTitle: crystal structure of samp1 from haloferax volcanii
55	c3ebsA	Alignment	not modelled	8.1	56	PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome p450 2a6; PDBTitle: human cytochrome p450 2a6 i208s/i300f/g301a/s369g in complex2 with phenacetin
56	c3lgaA	Alignment	not modelled	8.1	14	PDB header: hydrolase Chain: A: PDB Molecule: adenosine deaminase cecr1; PDBTitle: crystal structure of human adenosine deaminase growth factor,2 adenosine deaminase type 2 (ada2) complexed with transition state3 analogue, coformycin
57	c3jviA	Alignment	not modelled	8.1	19	PDB header: hydrolase Chain: A: PDB Molecule: protein tyrosine phosphatase; PDBTitle: product state mimic crystal structure of protein tyrosine phosphatase2 from entamoeba histolytica
58	c3bbnH	Alignment	not modelled	8.0	8	PDB header: ribosome Chain: H: PDB Molecule: ribosomal protein s8; PDBTitle: homology model for the spinach chloroplast 30s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome.
59	c2ogwB	Alignment	not modelled	7.9	7	PDB header: transport protein Chain: B: PDB Molecule: high-affinity zinc uptake system protein znua PDBTitle: structure of abc type zinc transporter from e. coli
60	d1a9xa1	Alignment	not modelled	7.8	42	Fold: Carbamoyl phosphate synthetase, large subunit connection domain Superfamily: Carbamoyl phosphate synthetase, large subunit connection domain Family: Carbamoyl phosphate synthetase, large subunit connection domain
61	c3e20C	Alignment	not modelled	7.7	15	PDB header: translation Chain: C: PDB Molecule: eukaryotic peptide chain release factor subunit 1; PDBTitle: crystal structure of s.pombe erf1/erf3 complex
62	c2qzuA	Alignment	not modelled	7.7	13	PDB header: hydrolase Chain: A: PDB Molecule: putative sulfatase yidj; PDBTitle: crystal structure of the putative sulfatase yidj from bacteroides2 fragilis. northeast structural genomics consortium target bfr123
63	d2joya1	Alignment	not modelled	7.5	8	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: Ribosomal protein L14e
64	c2uzhB	Alignment	not modelled	7.5	7	PDB header: lyase Chain: B: PDB Molecule: 2c-methyl-d-erythritol 2,4-cyclodiphosphate PDBTitle: mycobacterium smegmatis 2c-methyl-d-erythritol-2,4-2 cyclodiphosphate synthase (ispf)
65	d1gx1a	Alignment	not modelled	7.5	23	Fold: Bacillus chorismate mutase-like Superfamily: IpsF-like Family: IpsF-like
66	c3thaB	Alignment	not modelled	7.4	15	PDB header: lyase Chain: B: PDB Molecule: tryptophan synthase alpha chain; PDBTitle: tryptophan synthase subunit alpha from campylobacter jejuni.
67	c2dt7A	Alignment	not modelled	7.4	67	PDB header: rna binding protein Chain: A: PDB Molecule: splicing factor 3a subunit 3; PDBTitle: solution structure of the second surp domain of human2 splicing factor sf3a120 in complex with a fragment of3 human splicing factor sf3a60
68	c2jugB	Alignment	not modelled	7.3	17	PDB header: biosynthetic protein Chain: B: PDB Molecule: tubc protein; PDBTitle: multienzyme docking in hybrid megasynthetases
69	d2oux2	Alignment	not modelled	7.3	4	Fold: CBS-domain pair Superfamily: CBS-domain pair Family: CBS-domain pair
70	d1i94h	Alignment	not modelled	7.2	8	Fold: Ribosomal protein S8 Superfamily: Ribosomal protein S8 Family: Ribosomal protein S8
71	c2e0yB	Alignment	not modelled	7.2	19	PDB header: transferase Chain: B: PDB Molecule: gamma-glutamyltranspeptidase; PDBTitle: crystal structure of the samarium derivative of mature gamma-2 glutamyltranspeptidase from escherichia coli
72	c2c1tC	Alignment	not modelled	7.0	35	PDB header: protein transport/membrane protein Chain: C: PDB Molecule: nucleoporin nup2; PDBTitle: structure of the kap60p:nup2 complex
73	c2yvsA	Alignment	not modelled	7.0	8	PDB header: oxidoreductase Chain: A: PDB Molecule: glycolate oxidase subunit glce; PDBTitle: crystal structure of glycolate oxidase subunit glce from thermus2 thermophilus hb8
74	d1s6la1	Alignment	not modelled	6.9	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MerB N-terminal domain-like
75	c2pmpA	Alignment	not modelled	6.9	23	PDB header: lyase Chain: A: PDB Molecule: 2-c-methyl-d-erythritol 2,4-cyclodiphosphate synthase; PDBTitle: structure of 2c-methyl-d-erythritol 2,4-cyclodiphosphate synthase from2 the isoprenoid biosynthetic pathway of arabidopsis thaliana
76	c2o1eB	Alignment	not modelled	6.8	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: ycdh; PDBTitle: crystal structure of the metal-dependent lipoprotein ycdh2 from bacillus subtilis, northeast structural genomics3 target sr583
77	c3f0ga	Alignment	not modelled	6.7	21	PDB header: lyase Chain: A: PDB Molecule: 2-c-methyl-d-erythritol 2,4-cyclodiphosphate synthase; PDBTitle: co-crystal structure of 2c-methyl-d-erythritol 2,4-cyclodiphosphate2 synthase with cmp
78	c2pgoB	Alignment	not modelled	6.6	25	PDB header: transferase Chain: B: PDB Molecule: gamma-glutamyltranspeptidase;

78	c2lqvb_	Alignment	not modelled	6.6	23	PDBTitle: crystal structure of helicobacter pylori gamma-glutamyltranspeptidase
79	dliuga_	Alignment	not modelled	6.6	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
80	dlecfal	Alignment	not modelled	6.6	17	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
81	dlgph11	Alignment	not modelled	6.5	17	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
82	c2iirj_	Alignment	not modelled	6.4	16	PDB header: transferase Chain: J: PDB Molecule: acetate kinase; PDBTitle: acetate kinase from a hypothermophile thermotoga maritima
83	d1an7a_	Alignment	not modelled	6.4	8	Fold: Ribosomal protein S8 Superfamily: Ribosomal protein S8 Family: Ribosomal protein S8
84	c2j98A_	Alignment	not modelled	6.4	100	PDB header: rna-binding protein Chain: A: PDB Molecule: replicase polyprotein 1ab; PDBTitle: human coronavirus 229e non structural protein 9 cys69ala2 mutant (nsp9)
85	c1w9qB_	Alignment	not modelled	6.3	3	PDB header: cell adhesion Chain: B: PDB Molecule: syntenin 1; PDBTitle: crystal structure of the pdz tandem of human syntenin in2 complex with tneaf peptide
86	d2nnja1	Alignment	not modelled	6.3	56	Fold: Cytochrome P450 Superfamily: Cytochrome P450 Family: Cytochrome P450
87	c3izcN_	Alignment	not modelled	6.2	16	PDB header: ribosome Chain: N: PDB Molecule: 60s ribosomal protein rpl14 (l14e); PDBTitle: localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
88	d1a6qa1	Alignment	not modelled	6.0	71	Fold: Another 3-helical bundle Superfamily: Protein serine/threonine phosphatase 2C, C-terminal domain Family: Protein serine/threonine phosphatase 2C, C-terminal domain
89	dli6ua_	Alignment	not modelled	6.0	4	Fold: Ribosomal protein S8 Superfamily: Ribosomal protein S8 Family: Ribosomal protein S8
90	c3cqxD_	Alignment	not modelled	5.9	33	PDB header: chaperone Chain: D: PDB Molecule: bag family molecular chaperone regulator 2; PDBTitle: chaperone complex
91	c3lp9C_	Alignment	not modelled	5.9	27	PDB header: plant protein Chain: C: PDB Molecule: Is-24; PDBTitle: crystal structure of Is24, a seed albumin from lathyrus2 sativus
92	c2vqrA_	Alignment	not modelled	5.8	13	PDB header: hydrolase Chain: A: PDB Molecule: putative sulfatase; PDBTitle: crystal structure of a phosphonate monoester hydrolase2 from rhizobium leguminosarum: a new member of the3 alkaline phosphatase superfamily
93	c3iz5N_	Alignment	not modelled	5.8	8	PDB header: ribosome Chain: N: PDB Molecule: 60s ribosomal protein l14 (l14e); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
94	d2gy9h1	Alignment	not modelled	5.7	16	Fold: Ribosomal protein S8 Superfamily: Ribosomal protein S8 Family: Ribosomal protein S8
95	d1b74a1	Alignment	not modelled	5.7	15	Fold: ATC-like Superfamily: Aspartate/glutamate racemase Family: Aspartate/glutamate racemase
96	d1okra_	Alignment	not modelled	5.7	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Penicillinase repressor
97	c2b5dX_	Alignment	not modelled	5.6	8	PDB header: hydrolase Chain: X: PDB Molecule: alpha-amylase; PDBTitle: crystal structure of the novel alpha-amylase amyc from thermotoga2 maritima
98	d1iv3a_	Alignment	not modelled	5.6	21	Fold: Bacillus chorismate mutase-like Superfamily: lpsF-like Family: lpsF-like
99	d2crfa1	Alignment	not modelled	5.5	8	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Ran-binding domain