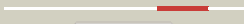


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P29131
Date	Thu Jan 5 11:45:35 GMT 2012
Unique Job ID	73a762ade1748b15

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1utaa_	 Alignment		99.9	100	Fold: Ferredoxin-like Superfamily: Sporulation related repeat Family: Sporulation related repeat
2	c1x60A_	 Alignment		99.8	29	PDB header: hydrolase Chain: A: PDB Molecule: sporulation-specific n-acetylmuramoyl-l-alanine PDBTitle: solution structure of the peptidoglycan binding domain of 2 b. subtilis cell wall lytic enzyme cwlc
3	c3caiA_	 Alignment		88.0	22	PDB header: transferase Chain: A: PDB Molecule: possible aminotransferase; PDBTitle: crystal structure of mycobacterium tuberculosis rv3778c2 protein
4	d1bs0a_	 Alignment		87.6	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
5	d1elua_	 Alignment		85.5	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
6	c3f9tB_	 Alignment		81.6	19	PDB header: lyase Chain: B: PDB Molecule: l-tyrosine decarboxylase mfna; PDBTitle: crystal structure of l-tyrosine decarboxylase mfna (ec 4.1.1.25)2 (np_247014.1) from methanococcus jannaschii at 2.11 a resolution
7	d1t3ia_	 Alignment		65.9	23	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
8	c2k49A_	 Alignment		59.9	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0339 protein so_3888; PDBTitle: solution nmr structure of upf0339 protein so3888 from shewanella2 oneidensis. northeast structural genomics consortium target sor190
9	d1iuga_	 Alignment		59.2	10	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
10	c3hdoB_	 Alignment		59.1	24	PDB header: transferase Chain: B: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: crystal structure of a histidinol-phosphate aminotransferase from2 geobacter metallireducens
11	c3cq6E_	 Alignment		58.3	18	PDB header: transferase Chain: E: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: histidinol-phosphate aminotransferase from corynebacterium2 glutamicum holo-form (plp covalently bound)

12	d1m32a_	Alignment		58.0	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
13	c2fyfB_	Alignment		56.4	18	PDB header: transferase Chain: B: PDB Molecule: phosphoserine aminotransferase; PDBTitle: structure of a putative phosphoserine aminotransferase from2 mycobacterium tuberculosis
14	c2yrrA_	Alignment		52.9	23	PDB header: transferase Chain: A: PDB Molecule: aminotransferase, class v; PDBTitle: hypothetical alanine aminotransferase (tth0173) from thermus2 thermophilus hb8
15	d1qz9a_	Alignment		52.8	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
16	d1v72a1	Alignment		52.6	22	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
17	c3hqtB_	Alignment		49.8	19	PDB header: transferase Chain: B: PDB Molecule: cai-1 autoinducer synthase; PDBTitle: plp-dependent acyl-coa transferase cqsa
18	d1wyua1	Alignment		47.6	20	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Glycine dehydrogenase subunits (GDC-P)
19	c3rggD_	Alignment		46.5	19	PDB header: lyase Chain: D: PDB Molecule: phosphoribosylaminoimidazole carboxylase, pure protein; PDBTitle: crystal structure of treponema denticola pure bound to air
20	d2f8ja1	Alignment		46.5	22	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
21	c2k8eA_	Alignment	not modelled	46.3	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0339 protein yegp; PDBTitle: solution nmr structure of protein of unknown function yegp from e.2 coli. ontario center for structural proteomics target ec0640_1_1233 northeast structural genomics consortium target et102.
22	d1eg5a_	Alignment	not modelled	44.5	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
23	c3p3dA_	Alignment	not modelled	44.2	21	PDB header: nuclear protein Chain: A: PDB Molecule: nucleoporin 53; PDBTitle: crystal structure of the nup53 rrm domain from pichia guilliermondii
24	d1gccA_	Alignment	not modelled	43.5	26	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
25	c2adbA_	Alignment	not modelled	43.0	9	PDB header: rna binding protein/rna Chain: A: PDB Molecule: polypyrimidine tract-binding protein 1; PDBTitle: solution structure of polypyrimidine tract binding protein2 rbd2 complexed with cucucu rna
26	d1dq3a4	Alignment	not modelled	41.6	14	Fold: Homing endonuclease-like Superfamily: Homing endonucleases Family: Intein endonuclease
27	c2y9jt_	Alignment	not modelled	41.0	14	PDB header: protein transport Chain: T: PDB Molecule: protein prgh; PDBTitle: three-dimensional model of salmonella's needle complex at2 subnanometer resolution
28	d1u11a_	Alignment	not modelled	40.0	16	Fold: Flavodoxin-like Superfamily: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)

						Family: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)
29	c2w8wA_	Alignment	not modelled	39.7	19	PDB header: transferase Chain: A: PDB Molecule: serine palmitoyltransferase; PDBTitle: n100y spt with plp-ser
30	d2c0ra1	Alignment	not modelled	38.5	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
31	c2x7iA_	Alignment	not modelled	37.9	17	PDB header: transferase Chain: A: PDB Molecule: mevalonate kinase; PDBTitle: crystal structure of mevalonate kinase from methicillin-2 resistant staphylococcus aureus mrsa252
32	c3a2bA_	Alignment	not modelled	37.6	13	PDB header: transferase Chain: A: PDB Molecule: serine palmitoyltransferase; PDBTitle: crystal structure of serine palmitoyltransferase from sphingobacterium2 multivorum with substrate l-serine
33	dlztpa1	Alignment	not modelled	36.4	8	Fold: elF4e-like Superfamily: elF4e-like Family: BLES03-like
34	dlnz8a_	Alignment	not modelled	35.9	17	Fold: Ferredoxin-like Superfamily: N-utilization substance G protein NusG, N-terminal domain Family: N-utilization substance G protein NusG, N-terminal domain
35	dlwglA_	Alignment	not modelled	35.7	8	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
36	c2fw9A_	Alignment	not modelled	35.2	16	PDB header: lyase Chain: A: PDB Molecule: n5-carboxyaminoimidazole ribonucleotide mutase; PDBTitle: structure of pure (n5-carboxyaminoimidazole ribonucleotide mutase)2 h59f from the acidophilic bacterium acetobacter aceti, at ph 8
37	d2hk6a1	Alignment	not modelled	33.5	15	Fold: Chelatase-like Superfamily: Chelatase Family: Ferrochelatase
38	dljf9a_	Alignment	not modelled	33.3	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
39	c3f0hA_	Alignment	not modelled	33.2	13	PDB header: transferase Chain: A: PDB Molecule: aminotransferase; PDBTitle: crystal structure of aminotransferase (rer070207000802) from2 eubacterium rectale at 1.70 a resolution
40	c3pn8A_	Alignment	not modelled	32.3	18	PDB header: hydrolase Chain: A: PDB Molecule: putative phospho-beta-glucosidase; PDBTitle: the crystal structure of 6-phospho-beta-glucosidase from streptococcus2 mutans ua159
41	c3lp6D_	Alignment	not modelled	32.1	21	PDB header: lyase Chain: D: PDB Molecule: phosphoribosylaminoimidazole carboxylase catalytic subunit; PDBTitle: crystal structure of rv3275c-e60a from mycobacterium tuberculosis at2 1.7a resolution
42	dlqcza_	Alignment	not modelled	31.8	16	Fold: Flavodoxin-like Superfamily: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE) Family: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)
43	c3e9kA_	Alignment	not modelled	31.1	17	PDB header: hydrolase Chain: A: PDB Molecule: kynureninase; PDBTitle: crystal structure of homo sapiens kynureninase-3-hydroxyhippuric acid2 inhibitor complex
44	c3trhl_	Alignment	not modelled	30.8	16	PDB header: lyase Chain: I: PDB Molecule: phosphoribosylaminoimidazole carboxylase PDBTitle: structure of a phosphoribosylaminoimidazole carboxylase catalytic2 subunit (pure) from coxiella burnetii
45	c2dr1A_	Alignment	not modelled	29.2	11	PDB header: transferase Chain: A: PDB Molecule: 386aa long hypothetical serine aminotransferase; PDBTitle: crystal structure of the ph1308 protein from pyrococcus horikoshii ot3
46	dlm6sa_	Alignment	not modelled	28.6	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
47	clyj7A_	Alignment	not modelled	28.6	12	PDB header: protein transport Chain: A: PDB Molecule: escj; PDBTitle: crystal structure of enteropathogenic e.coli (epec) type iii secretion2 system protein escj
48	dlnh8a2	Alignment	not modelled	28.1	12	Fold: Ferredoxin-like Superfamily: GlnB-like Family: ATP phosphoribosyltransferase (ATP-PRTase, HisG), regulatory C-terminal domain
49	c3rfaA_	Alignment	not modelled	27.8	17	PDB header: oxidoreductase Chain: A: PDB Molecule: ribosomal rna large subunit methyltransferase n; PDBTitle: x-ray structure of rlmn from escherichia coli in complex with s-2 adenosylmethionine
50	c2k06A_	Alignment	not modelled	27.5	13	PDB header: transcription Chain: A: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of the aminoterminal domain of e. coli2 nusg
51	c3cbfA_	Alignment	not modelled	26.8	15	PDB header: transferase Chain: A: PDB Molecule: alpha-aminodipate aminotransferase; PDBTitle: crystal structure of lysn, alpha-aminoadipate2 aminotransferase, from thermus thermophilus hb27
52	c2j75A_	Alignment	not modelled	26.7	18	PDB header: hydrolase Chain: A: PDB Molecule: beta-glucosidase a; PDBTitle: beta-glucosidase from thermotoga maritima in complex

						with2 noeuromycin
53	c3hyjD_	Alignment	not modelled	26.5	22	PDB header: transcription regulator Chain: D: PDB Molecule: protein duf199/whia; PDBTitle: crystal structure of the n-terminal laglidadg domain of duf199/whia
54	c3orsD_	Alignment	not modelled	26.3	17	PDB header: isomerase,biosynthetic protein Chain: D: PDB Molecule: n5-carboxyaminoimidazole ribonucleotide mutase; PDBTitle: crystal structure of n5-carboxyaminoimidazole ribonucleotide mutase2 from staphylococcus aureus
55	d1xmpa_	Alignment	not modelled	26.2	18	Fold: Flavodoxin-like Superfamily: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE) Family: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)
56	c3nthA_	Alignment	not modelled	25.0	16	PDB header: transcription Chain: A: PDB Molecule: maternal protein tudor; PDBTitle: crystal structure of tudor and aubergine [r13(me2s)] complex
57	c3mafB_	Alignment	not modelled	24.1	17	PDB header: lyase Chain: B: PDB Molecule: sphingosine-1-phosphate lyase; PDBTitle: crystal structure of stspl (asymmetric form)
58	d1js3a_	Alignment	not modelled	23.7	6	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Pyridoxal-dependent decarboxylase
59	c2hzpA_	Alignment	not modelled	23.7	17	PDB header: hydrolase Chain: A: PDB Molecule: kynureninase; PDBTitle: crystal structure of homo sapiens kynureninase
60	c2p2uA_	Alignment	not modelled	23.6	41	PDB header: dna binding protein Chain: A: PDB Molecule: host-nuclease inhibitor protein gam, putative; PDBTitle: crystal structure of putative host-nuclease inhibitor2 protein gam from desulfovibrio vulgaris
61	c2h31A_	Alignment	not modelled	23.3	18	PDB header: ligase, lyase Chain: A: PDB Molecule: multifunctional protein ade2; PDBTitle: crystal structure of human paics, a bifunctional carboxylase and2 synthetase in purine biosynthesis
62	c3nohA_	Alignment	not modelled	23.1	50	PDB header: peptide binding protein Chain: A: PDB Molecule: putative peptide binding protein; PDBTitle: crystal structure of a putative peptide binding protein (rumgna_00914)2 from ruminococcus gnavus atcc 29149 at 1.60 a resolution
63	d1u0bb1	Alignment	not modelled	22.5	16	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
64	c3bfjK_	Alignment	not modelled	21.3	15	PDB header: oxidoreductase Chain: K: PDB Molecule: 1,3-propanediol oxidoreductase; PDBTitle: crystal structure analysis of 1,3-propanediol oxidoreductase
65	c2q5cA_	Alignment	not modelled	21.1	18	PDB header: transcription Chain: A: PDB Molecule: ntrc family transcriptional regulator; PDBTitle: crystal structure of ntrc family transcriptional regulator from2 clostridium acetobutylicum
66	d2cpia1	Alignment	not modelled	21.0	11	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
67	d1oj4a2	Alignment	not modelled	20.4	11	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: 4-(cytidine 5'-diphospho)-2C-methyl-D-erythritol kinase lspE
68	d1lbqa_	Alignment	not modelled	20.1	13	Fold: Chelatase-like Superfamily: Chelatase Family: Ferrochelatase
69	c2huuA_	Alignment	not modelled	20.1	13	PDB header: transferase Chain: A: PDB Molecule: alanine glyoxylate aminotransferase; PDBTitle: crystal structure of aedes aegypti alanine glyoxylate2 aminotransferase in complex with alanine
70	c3ffrA_	Alignment	not modelled	20.0	13	PDB header: transferase Chain: A: PDB Molecule: phosphoserine aminotransferase serc; PDBTitle: crystal structure of a phosphoserine aminotransferase serc (chu_0995)2 from cytophaga hutchinsonii atcc 33406 at 1.75 a resolution
71	d1rk8a_	Alignment	not modelled	19.7	11	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
72	d1fg7a_	Alignment	not modelled	19.5	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
73	c3ox4D_	Alignment	not modelled	19.3	19	PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 2; PDBTitle: structures of iron-dependent alcohol dehydrogenase 2 from zymomonas2 mobilis zm4 complexed with nad cofactor
74	c2eqkA_	Alignment	not modelled	19.0	43	PDB header: transcription Chain: A: PDB Molecule: tudor domain-containing protein 4; PDBTitle: solution structure of the tudor domain of tudor domain-2 containing protein 4
75	d1wsta1	Alignment	not modelled	18.9	10	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
76	d2erra1	Alignment	not modelled	18.4	8	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
77	c3o6cA_	Alignment	not modelled	18.1	12	PDB header: transferase Chain: A: PDB Molecule: pyridoxine 5'-phosphate synthase;

77	c300aA	Alignment	not modelled	18.1	12	PDBTitle: pyridoxal phosphate biosynthetic protein pdxj from campylobacter2 jejuni PDB header: transcription regulator Chain: A: PDB Molecule: protein duf199/whia; PDBTitle: crystal structure of full-length duf199/whia from thermatoga maritima
78	c3hyiA	Alignment	not modelled	18.0	18	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
79	d1s0aa	Alignment	not modelled	17.9	6	PDB header: hydrolase Chain: A: PDB Molecule: beta-glucosidase b; PDBTitle: beta-glucosidase b from paenibacillus polymyxa complexed2 with cellotetraose
80	c2z1sA	Alignment	not modelled	17.8	18	PDB header: transferase Chain: A: PDB Molecule: acetylornithine aminotransferase; PDBTitle: crystal structure of acetylornithine aminotransferase (ec 2.6.1.11)2 (acoat) (tm1785) from thermotoga maritima at 1.40 a resolution
81	c2ordA	Alignment	not modelled	17.6	15	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate kinase
82	d1kvka2	Alignment	not modelled	17.1	19	PDB header: rna binding protein Chain: A: PDB Molecule: splicing factor, arginine/serine-rich 7; PDBTitle: solution structure of the rrm domain of sr rich factor 9g8
83	c2hvxA	Alignment	not modelled	16.8	7	PDB header: rna binding protein/chimera Chain: A: PDB Molecule: fusion protein consists of immunoglobulin g- PDBTitle: solution structure of the rrm of srp20
84	c2i38A	Alignment	not modelled	16.6	12	PDB header: hydrolase Chain: A: PDB Molecule: cytosolic beta-glucosidase; PDBTitle: crystal structure of the covalent intermediate of human cytosolic2 beta-glucosidase
85	c2zoxA	Alignment	not modelled	16.1	18	PDB header: transferase Chain: A: PDB Molecule: putative dna ligase-like protein rv0938/mt0965; PDBTitle: crystal structure of the polymerase domain from mycobacterium2 tuberculosis ligase d
86	c2iruA	Alignment	not modelled	16.0	24	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical upf0166 protein ph1503; PDBTitle: structure of ph1503 protein from pyrococcus horikoshii ot3
87	c2dclB	Alignment	not modelled	15.9	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: DEP domain
88	d1fsha	Alignment	not modelled	15.9	16	PDB header: rna binding protein Chain: A: PDB Molecule: nuclear and cytoplasmic polyadenylated rna-binding protein PDBTitle: crystal structure of the first two rrm domains of yeast poly(u)2 binding protein (pub1)
89	c3md3A	Alignment	not modelled	15.9	4	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: LplA-like
90	d2p5ia1	Alignment	not modelled	15.7	27	PDB header: protein transport Chain: D: PDB Molecule: chimeric complex between protein dishevelled2 homolog dvl-2 PDBTitle: a complex between dishevelled2 and clathrin adaptor ap-2
91	c3ml6D	Alignment	not modelled	15.5	15	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Family 1 of glycosyl hydrolase
92	d1pbga	Alignment	not modelled	15.2	14	Fold: Ferredoxin-like Superfamily: GlnB-like Family: DUF190/COG1993
93	d1o51a	Alignment	not modelled	14.6	16	PDB header: hydrolase Chain: F: PDB Molecule: dhurrinase; PDBTitle: crystal structure of the sorghum bicolor dhurrinase 1
94	c1v02F	Alignment	not modelled	14.2	20	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Family 1 of glycosyl hydrolase
95	d1v02a	Alignment	not modelled	14.2	20	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
96	d2a21a1	Alignment	not modelled	14.2	15	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
97	d2k7ia1	Alignment	not modelled	14.1	11	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: upf0339 protein atu0232; PDBTitle: solution nmr structure of protein atu0232 from agrobacterium2 tumefaciens. northeast structural genomics consortium (nesg) target3 att3. ontario center for structural proteomics target atc0223.
98	c2k7iB	Alignment	not modelled	14.1	11	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
99	d1rv3a	Alignment	not modelled	14.1	10	