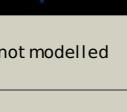


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P00547
Date	Thu Jan 5 10:56:41 GMT 2012
Unique Job ID	2a793123967a329d

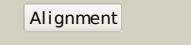
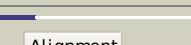
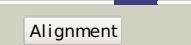
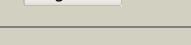
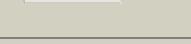
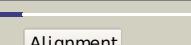
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1fwID_			100.0	29	PDB header: transferase Chain: D; PDB Molecule: homoserine kinase; PDBTitle: crystal structure of homoserine kinase
2	c3hulA_			100.0	23	PDB header: transferase Chain: A; PDB Molecule: homoserine kinase; PDBTitle: structure of putative homoserine kinase thrb from listeria2 monocytogenes
3	c2cz9A_			100.0	16	PDB header: transferase Chain: A; PDB Molecule: probable galactokinase; PDBTitle: crystal structure of galactokinase from pyrococcus horikoshi
4	c2v34B_			100.0	22	PDB header: transferase Chain: B; PDB Molecule: 4-diphosphocytidyl-2c-methyl-d-erythritol kinase; PDBTitle: ispe in complex with cytidine and ligand
5	c1pieA_			100.0	14	PDB header: transferase Chain: A; PDB Molecule: galactokinase; PDBTitle: crystal structure of lactococcus lactis galactokinase2 complexed with galactose
6	c3k17A_			100.0	18	PDB header: transferase Chain: A; PDB Molecule: lin0012 protein; PDBTitle: crystal structure of a lin0012 protein from listeria innocua
7	c2hfub_			100.0	15	PDB header: transferase Chain: B; PDB Molecule: mevalonate kinase, putative; PDBTitle: crystal structure of l. major mevalonate kinase in complex2 with r-mevalonate
8	clueka_			100.0	24	PDB header: transferase Chain: A; PDB Molecule: 4-(cytidine 5'-diphospho)-2c-methyl-d-erythritol PDBTitle: crystal structure of 4-(cytidine 5'-diphospho)-2c-methyl-d-2 erythritol kinase
9	c2hk3A_			100.0	15	PDB header: lyase Chain: A; PDB Molecule: diphosphomevalonate decarboxylase; PDBTitle: crystal structure of mevalonate diphosphate decarboxylase2 from staphylococcus aureus (orthorhombic form)
10	c2x7iA_			100.0	17	PDB header: transferase Chain: A; PDB Molecule: mevalonate kinase; PDBTitle: crystal structure of mevalonate kinase from methicillin-2 resistant staphylococcus aureus mrsa252
11	c1oj4B_			100.0	19	PDB header: transferase Chain: B; PDB Molecule: 4-diphosphocytidyl-2-c-methyl-d-erythritol kinase PDBTitle: ternary complex of 2 4-diphosphocytidyl-2-c-methyl-d-erythritol kinase

12	c1wuuA	Alignment		100.0	17	PDB header: transferase Chain: A: PDB Molecule: galactokinase; PDBTitle: crystal structure of human galactokinase complexed with2 mgamppnp and galactose
13	c3k85B	Alignment		100.0	22	PDB header: transferase Chain: B: PDB Molecule: d-glycero-d-manno-heptose 1-phosphate kinase; PDBTitle: crystal structure of a d-glycero-d-manno-heptose 1-phosphate2 kinase from bacteroides thetaotaomicron
14	c1k47F	Alignment		100.0	12	PDB header: transferase Chain: F: PDB Molecule: phosphomevalonate kinase; PDBTitle: crystal structure of the streptococcus pneumoniae2 phosphomevalonate kinase (pmk)
15	c2a2cA	Alignment		100.0	22	PDB header: transferase Chain: A: PDB Molecule: n-acetyl galactosamine kinase; PDBTitle: x-ray structure of human n-acetyl galactosamine kinase2 complexed with mg-adp and n-acetyl galactosamine 1-3 phosphate
16	c2gs8A	Alignment		100.0	16	PDB header: lyase Chain: A: PDB Molecule: mevalonate pyrophosphate decarboxylase; PDBTitle: structure of mevalonate pyrophosphate decarboxylase from streptococcus2 pyogenes
17	c2oi2A	Alignment		100.0	16	PDB header: transferase Chain: A: PDB Molecule: mevalonate kinase; PDBTitle: streptococcus pneumoniae mevalonate kinase in complex with2 diphosphomevalonate
18	c1kkhA	Alignment		100.0	15	PDB header: transferase Chain: A: PDB Molecule: mevalonate kinase; PDBTitle: crystal structure of the methanococcus jannaschii2 mevalonate kinase
19	c2aj4B	Alignment		100.0	19	PDB header: transferase Chain: B: PDB Molecule: galactokinase; PDBTitle: crystal structure of saccharomyces cerevisiae galactokinase2 in complex with galactose and mg:ampnpp
20	c2r42A	Alignment		100.0	17	PDB header: transferase Chain: A: PDB Molecule: mevalonate kinase; PDBTitle: the biochemical and structural basis for feedback2 inhibition of mevalonate kinase and isoprenoid metabolism
21	d1h72c1	Alignment	not modelled	100.0	31	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
22	c3ltoB	Alignment	not modelled	100.0	16	PDB header: lyase Chain: B: PDB Molecule: mevalonate diphosphate decarboxylase; PDBTitle: crystal structure of a mevalonate diphosphate decarboxylase2 from legionella pneumophila
23	c2hkeB	Alignment	not modelled	99.9	18	PDB header: lyase Chain: B: PDB Molecule: diphosphomevalonate decarboxylase, putative; PDBTitle: mevalonate diphosphate decarboxylase from trypanosoma brucei
24	d1k47a1	Alignment	not modelled	99.9	12	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
25	d1kkha1	Alignment	not modelled	99.9	14	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
26	d1oj4a1	Alignment	not modelled	99.9	18	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
27	d1ueka1	Alignment	not modelled	99.9	25	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
28	d1piea1	Alignment	not modelled	99.9	15	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
						Fold: Ribosomal protein S5 domain 2-like

29	d1s4ea1	Alignment	not modelled	99.9	16	Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
30	c1fi4A_	Alignment	not modelled	99.9	17	PDB header: lyase Chain: A: PDB Molecule: mevalonate 5-diphosphate decarboxylase; PDBTitle: the x-ray crystal structure of mevalonate 5-diphosphate decarboxylase2 at 2.3 angstrom resolution.
31	d1wuua1	Alignment	not modelled	99.9	19	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
32	d1kvka1	Alignment	not modelled	99.9	18	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
33	d1h72c2	Alignment	not modelled	99.9	27	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Homoserine kinase
34	d1fi4a1	Alignment	not modelled	99.9	20	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: GHMP Kinase, N-terminal domain
35	c3f0nb_	Alignment	not modelled	99.7	14	PDB header: lyase Chain: B: PDB Molecule: mevalonate pyrophosphate decarboxylase; PDBTitle: mus musculus mevalonate pyrophosphate decarboxylase
36	d1k47a2	Alignment	not modelled	99.6	11	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Phosphomevalonate kinase (PMK)
37	d1kvka2	Alignment	not modelled	99.6	13	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate kinase
38	d1ueka2	Alignment	not modelled	99.6	22	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: 4-(cytidine 5'-diphospho)-2C-methyl-D-erythritol kinase IspE
39	d1piea2	Alignment	not modelled	99.5	13	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
40	d1wuua2	Alignment	not modelled	99.5	15	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
41	d1s4ea2	Alignment	not modelled	99.5	16	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
42	d1kkha2	Alignment	not modelled	99.5	14	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate kinase
43	d1oj4a2	Alignment	not modelled	99.4	16	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: 4-(cytidine 5'-diphospho)-2C-methyl-D-erythritol kinase IspE
44	d1fi4a2	Alignment	not modelled	96.8	15	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate 5-diphosphate decarboxylase
45	c3m05A_	Alignment	not modelled	65.0	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein pepe_1480; PDBTitle: the crystal structure of a functionally unknown protein2 pepe_1480 from pediococcus pentosaceus atcc 25745
46	c3dfeA_	Alignment	not modelled	38.8	20	PDB header: signaling protein Chain: A: PDB Molecule: putative pii-like signaling protein; PDBTitle: crystal structure of a putative pii-like signaling protein2 (yp_323533.1) from anabaena variabilis atcc 29413 at 2.35 a3 resolution
47	d1o51a_	Alignment	not modelled	35.7	20	Fold: Ferredoxin-like Superfamily: GlnB-like Family: DUF190/COG1993
48	d2cz4a1	Alignment	not modelled	31.2	20	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
49	d1wg1a_	Alignment	not modelled	29.4	16	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
50	c2j9dG_	Alignment	not modelled	25.1	15	PDB header: membrane transport Chain: G: PDB Molecule: hypothetical nitrogen regulatory pii-like PDBTitle: structure of glnk1 with bound effectors indicates2 regulatory mechanism for ammonia uptake
51	c3gaaB_	Alignment	not modelled	24.8	12	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein ta1441; PDBTitle: the crystal structure of the protein with unknown function from2 thermoplasma acidophilum
52	c3bzqA_	Alignment	not modelled	24.4	15	PDB header: signaling protein/transcription Chain: A: PDB Molecule: nitrogen regulatory protein p-ii; PDBTitle: high resolution crystal structure of nitrogen regulatory protein2 (rv2919c) of mycobacterium tuberculosis
53	d1xxaa_	Alignment	not modelled	22.2	12	Fold: DCoH-like Superfamily: C-terminal domain of arginine repressor Family: C-terminal domain of arginine repressor
54	d2p90a1	Alignment	not modelled	21.8	11	Fold: Phosphorylase/hydrolase-like Superfamily: Cgl1923-like Family: Cgl1923-like
55	d2p5ma1	Alignment	not modelled	20.5	18	Fold: DCoH-like Superfamily: C-terminal domain of arginine repressor Family: C-terminal domain of arginine repressor

56	d1b4ba	Alignment	not modelled	20.0	20	Fold: DCoH-like Superfamily: C-terminal domain of arginine repressor Family: C-terminal domain of arginine repressor
57	c3mnfA	Alignment	not modelled	19.8	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: pac2 family protein; PDBTitle: crystal structure of pac2 family protein from streptomyces avermitilis 2a
58	c3cagF	Alignment	not modelled	19.7	20	PDB header: dna binding protein Chain: F: PDB Molecule: arginine repressor; PDBTitle: crystal structure of the oligomerization domain hexamer of the 2 arginine repressor protein from mycobacterium tuberculosis in complex3 with 9 arginines.
59	c1vkrA	Alignment	not modelled	19.0	24	PDB header: transferase Chain: A: PDB Molecule: mannitol-specific pts system enzyme iiabc components; PDBTitle: structure of iib domain of the mannitol-specific permease enzyme ii
60	d1vkra	Alignment	not modelled	19.0	24	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Lactose/Cellobiose specific IIB subunit
61	c2p90B	Alignment	not modelled	18.7	11	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein cgl1923; PDBTitle: the crystal structure of a protein of unknown function from2 corynebacterium glutamicum atcc 13032
62	d2ns1b1	Alignment	not modelled	17.7	18	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
63	d1or5a	Alignment	not modelled	17.2	16	Fold: Acyl carrier protein-like Superfamily: ACP-like Family: Acyl-carrier protein (ACP)
64	c3ncpD	Alignment	not modelled	15.6	18	PDB header: signaling protein Chain: D: PDB Molecule: nitrogen regulatory protein p-ii (glnb-2); PDBTitle: glnk2 from archaeoglobus fulgidus
65	d1hwua	Alignment	not modelled	15.0	15	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
66	c2wamB	Alignment	not modelled	14.5	13	PDB header: unknown function Chain: B: PDB Molecule: conserved hypothetical alanine and leucine rich PDBTitle: crystal structure of mycobacterium tuberculosis unknown2 function protein rv2714
67	c2cq8A	Alignment	not modelled	14.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: 10-formyltetrahydrofolate dehydrogenase; PDBTitle: solution structure of rsg1 ruh-033, a pp-binding domain of2 10-fthfdh from human cdna
68	d2gdwa1	Alignment	not modelled	14.0	17	Fold: Acyl carrier protein-like Superfamily: ACP-like Family: Peptidyl carrier domain
69	d1ul3a	Alignment	not modelled	13.9	16	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
70	c2gnwA	Alignment	not modelled	13.9	16	PDB header: signaling protein Chain: A: PDB Molecule: acyl carrier protein; PDBTitle: toxoplasma gondii apicoplast-targeted acyl carrier protein
71	d1vkua	Alignment	not modelled	12.6	14	Fold: Acyl carrier protein-like Superfamily: ACP-like Family: Acyl-carrier protein (ACP)
72	c2I4bA	Alignment	not modelled	12.3	16	PDB header: transferase Chain: A: PDB Molecule: acyl carrier protein; PDBTitle: solution structure of a putative acyl carrier protein from anaplasma phagocytophilum. seattle structural genomics center for infectious3 disease target anpha.01018.a
73	c3ieiD	Alignment	not modelled	12.2	27	PDB header: transferase Chain: D: PDB Molecule: leucine carboxyl methyltransferase 1; PDBTitle: crystal structure of human leucine carboxyl methyltransferase-1 in2 complex with s-adenosyl homocysteine
74	c1x3oA	Alignment	not modelled	11.6	13	PDB header: lipid transport Chain: A: PDB Molecule: acyl carrier protein; PDBTitle: crystal structure of the acyl carrier protein from thermus2 thermophilus hb8
75	c2dcIB	Alignment	not modelled	11.3	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical upf0166 protein ph1503; PDBTitle: structure of ph1503 protein from pyrococcus horikoshii ot3
76	c3czcA	Alignment	not modelled	11.0	29	PDB header: transferase Chain: A: PDB Molecule: rmpb; PDBTitle: the crystal structure of a putative pts iib(ptxb) from2 streptococcus mutans
77	c3mntA	Alignment	not modelled	10.9	27	PDB header: transferase Chain: A: PDB Molecule: leucine carboxyl methyltransferase 1; PDBTitle: crystal structure of human leucine carboxyl methyltransferase 1
78	c2zwaA	Alignment	not modelled	10.9	36	PDB header: transferase Chain: A: PDB Molecule: leucine carboxyl methyltransferase 2; PDBTitle: crystal structure of tRNA wybutosine synthesizing enzyme2 tyw4
79	d1aopa1	Alignment	not modelled	10.7	13	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
80	d1mg7a1	Alignment	not modelled	10.4	14	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Early switch protein XOL-1, N-terminal domain

81	d1rjda		Alignment	not modelled	10.1	21	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Leucine carboxy methyltransferase Ppm1
82	d2piia		Alignment	not modelled	9.9	16	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
83	c2kwIA		Alignment	not modelled	9.6	10	PDB header: lipid binding protein Chain: A: PDB Molecule: acyl carrier protein; PDBTitle: solution structure of acyl carrier protein from borrelia burgdorferi
84	d1uhva1		Alignment	not modelled	9.0	57	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: Composite domain of glycosyl hydrolase families 5, 30, 39 and 51
85	d1wi6a1		Alignment	not modelled	8.6	9	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
86	c2jvfA		Alignment	not modelled	8.2	16	PDB header: de novo protein Chain: A: PDB Molecule: de novo protein m7; PDBTitle: solution structure of m7, a computationally-designed2 artificial protein
87	d3begb1		Alignment	not modelled	8.0	16	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
88	c2btqB		Alignment	not modelled	7.9	24	PDB header: structural protein Chain: B: PDB Molecule: tubulin btubb; PDBTitle: structure of btubab heterodimer from prosthecobacter2 dejongeii
89	d2axtj1		Alignment	not modelled	7.6	83	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein J, Psbj Family: PsbJ-like
90	c2btoA		Alignment	not modelled	7.4	15	PDB header: cytoskeletal protein Chain: A: PDB Molecule: tubulin btuba; PDBTitle: structure of btuba from prosthecobacter dejongeii
91	c3mhyC		Alignment	not modelled	7.3	15	PDB header: signaling protein Chain: C: PDB Molecule: pii-like protein pz; PDBTitle: a new pii protein structure
92	c2liuA		Alignment	not modelled	7.1	23	PDB header: transferase Chain: A: PDB Molecule: cura; PDBTitle: nmr structure of holo-acpi domain from cura module from lyngbya2 majuscula
93	d2dfa1		Alignment	not modelled	7.0	55	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: LamB/YcsF-like
94	d1wg4a		Alignment	not modelled	7.0	14	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
95	d1a6qal		Alignment	not modelled	6.9	26	Fold: Another 3-helical bundle Superfamily: Protein serine/threonine phosphatase 2C, C-terminal domain Family: Protein serine/threonine phosphatase 2C, C-terminal domain
96	d1tubb1		Alignment	not modelled	6.9	17	Fold: Tubulin nucleotide-binding domain-like Superfamily: Tubulin nucleotide-binding domain-like Family: Tubulin, GTPase domain
97	d1v6ta		Alignment	not modelled	6.7	36	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: LamB/YcsF-like
98	c1b4aA		Alignment	not modelled	6.7	20	PDB header: repressor Chain: A: PDB Molecule: arginine repressor; PDBTitle: structure of the arginine repressor from bacillus stearotherophilus
99	c2x5eA		Alignment	not modelled	6.6	36	PDB header: unknown function Chain: A: PDB Molecule: upf0271 protein pa4511; PDBTitle: crystal structure of the hypothetical protein pa4511 from2 pseudomonas aeruginosa