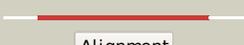
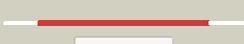


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0A7E9
Date	Thu Jan 5 11:05:32 GMT 2012
Unique Job ID	840e0722f6de32c5

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2bnea1	 Alignment		100.0	100	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
2	dlybda1	 Alignment		100.0	51	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
3	d2a1fa1	 Alignment		100.0	77	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
4	dlz9da1	 Alignment		100.0	46	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
5	c3ek5A_	 Alignment		100.0	56	PDB header: transferase Chain: A: PDB Molecule: uridylate kinase; PDBTitle: unique gtp-binding pocket and allosterity of ump kinase from a gram-2 negative phytopathogen bacterium
6	c2jxxC_	 Alignment		100.0	44	PDB header: transferase Chain: C: PDB Molecule: uridylate kinase; PDBTitle: the crystal structure of ump kinase from bacillus anthracis2 (ba1797)
7	c3nwyB_	 Alignment		100.0	47	PDB header: transferase Chain: B: PDB Molecule: uridylate kinase; PDBTitle: structure and allosteric regulation of the uridine monophosphate2 kinase from mycobacterium tuberculosis
8	c2va1A_	 Alignment		100.0	35	PDB header: transferase Chain: A: PDB Molecule: uridylate kinase; PDBTitle: crystal structure of ump kinase from ureaplasma parvum
9	c2j5tF_	 Alignment		100.0	18	PDB header: transferase Chain: F: PDB Molecule: glutamate 5-kinase; PDBTitle: glutamate 5-kinase from escherichia coli complexed with2 glutamate
10	c2w21A_	 Alignment		100.0	18	PDB header: transferase Chain: A: PDB Molecule: glutamate 5-kinase; PDBTitle: crystal structure of the aminoacid kinase domain of the2 glutamate 5 kinase of escherichia coli.
11	c3l76B_	 Alignment		100.0	23	PDB header: transferase Chain: B: PDB Molecule: aspartokinase; PDBTitle: crystal structure of aspartate kinase from synechocystis

12	d2brxa1	Alignment		100.0	29	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
13	d2ij9a1	Alignment		100.0	33	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
14	d2akoa1	Alignment		100.0	15	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
15	c2j4kC	Alignment		100.0	27	PDB header: transferase Chain: C: PDB Molecule: uridylate kinase; PDBTitle: crystal structure of uridylate kinase from sulfolobus2 solfataricus in complex with ump to 2.2 angstrom3 resolution
16	c3ab4K	Alignment		100.0	26	PDB header: transferase Chain: K: PDB Molecule: aspartokinase; PDBTitle: crystal structure of feedback inhibition resistant mutant of aspartate2 kinase from corynebacterium glutamicum in complex with lysine and3 threonine
17	c3c1nA	Alignment		100.0	27	PDB header: transferase Chain: A: PDB Molecule: probable aspartokinase; PDBTitle: crystal structure of allosteric inhibition threonine-sensitive2 aspartokinase from methanococcus jannaschii with l-threonine
18	d2hmf1	Alignment		100.0	26	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
19	c2ogxB	Alignment		100.0	22	PDB header: metal binding protein Chain: B: PDB Molecule: molybdenum storage protein subunit beta; PDBTitle: the crystal structure of the molybdenum storage protein from2 azotobacter vinelandii loaded with polyoxotungstates (wsto)
20	d2j0wa1	Alignment		100.0	23	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
21	c2rd5A	Alignment	not modelled	100.0	15	PDB header: protein binding Chain: A: PDB Molecule: acetylglutamate kinase-like protein; PDBTitle: structural basis for the regulation of n-acetylglutamate kinase by pii2 in arabidopsis thaliana
22	d2bufa1	Alignment	not modelled	100.0	17	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
23	d2ap9a1	Alignment	not modelled	100.0	23	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
24	c2v5hB	Alignment	not modelled	100.0	14	PDB header: transcription Chain: B: PDB Molecule: acetylglutamate kinase; PDBTitle: controlling the storage of nitrogen as arginine: the2 complex of pii and acetylglutamate kinase from3 synechococcus elongatus pcc 7942
25	d1e19a	Alignment	not modelled	100.0	21	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: Carbamate kinase
26	c2j0wA	Alignment	not modelled	100.0	24	PDB header: transferase Chain: A: PDB Molecule: lysine-sensitive aspartokinase 3; PDBTitle: crystal structure of e. coli aspartokinase iii in complex2 with aspartate and adp (r-state)
27	d1b7ba	Alignment	not modelled	100.0	17	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: Carbamate kinase
28	c2ogxA	Alignment	not modelled	100.0	18	PDB header: metal binding protein Chain: A: PDB Molecule: molybdenum storage protein subunit alpha; PDBTitle: the crystal structure of the molybdenum storage protein from2 azotobacter vinelandii loaded with polyoxotungstates (wsto)

29	d2cdqa1	Alignment	not modelled	100.0	24	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
30	c3k4yB	Alignment	not modelled	100.0	23	PDB header: transferase Chain: B: PDB Molecule: isopentenyl phosphate kinase; PDBTitle: crystal structure of isopentenyl phosphate kinase from jannaschii2 in complex with ipp
31	d1gs5a	Alignment	not modelled	100.0	19	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
32	c2e9yA	Alignment	not modelled	100.0	19	PDB header: transferase Chain: A: PDB Molecule: carbamate kinase; PDBTitle: crystal structure of project ape1968 from aeropyrum pernix k1
33	c3l19A	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: isopentenyl phosphate kinase; PDBTitle: x-ray structures of isopentenyl phosphate kinase
34	c2cdqB	Alignment	not modelled	100.0	26	PDB header: transferase Chain: B: PDB Molecule: aspartokinase; PDBTitle: crystal structure of arabidopsis thaliana aspartate kinase2 complexed with lysine and s-adenosylmethionine
35	d2btya1	Alignment	not modelled	100.0	21	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
36	c3l15C	Alignment	not modelled	100.0	16	PDB header: transferase Chain: C: PDB Molecule: gamma-glutamyl kinase related protein; PDBTitle: crystal structure of t. acidophilum isopentenyl phosphate kinase2 product complex
37	c3d40A	Alignment	not modelled	100.0	18	PDB header: transferase Chain: A: PDB Molecule: foma protein; PDBTitle: crystal structure of fosfomicin resistance kinase foma from2 streptomyces wedmorensis complexed with diphosphate
38	c3kzfC	Alignment	not modelled	100.0	21	PDB header: transferase Chain: C: PDB Molecule: carbamate kinase; PDBTitle: structure of giardia carbamate kinase
39	c2egxA	Alignment	not modelled	100.0	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative acetylglutamate kinase; PDBTitle: crystal structure of the putative acetylglutamate kinase from thermus2 thermophilus
40	c2r98A	Alignment	not modelled	100.0	19	PDB header: transferase Chain: A: PDB Molecule: putative acetylglutamate synthase; PDBTitle: crystal structure of n-acetylglutamate synthase (selenomet2 substituted) from neisseria gonorrhoeae
41	c3l86A	Alignment	not modelled	100.0	19	PDB header: transferase Chain: A: PDB Molecule: acetylglutamate kinase; PDBTitle: the crystal structure of smu.665 from streptococcus mutans ua159
42	d1k1ea	Alignment	not modelled	81.5	20	Fold: HAD-like Superfamily: HAD-like Family: Probable phosphatase Yrbl
43	c3e8mD	Alignment	not modelled	75.2	25	PDB header: transferase Chain: D: PDB Molecule: acylneuramate cytidyltransferase; PDBTitle: structure-function analysis of 2-keto-3-deoxy-d-glycero-d-galacto-2 nononate-9-phosphate (kdn) phosphatase defines a new clad within the3 type c0 had subfamily
44	c2p9jH	Alignment	not modelled	74.3	15	PDB header: structural genomics, unknown function Chain: H: PDB Molecule: hypothetical protein aq2171; PDBTitle: crystal structure of aq2171 from aquifex aeolicus
45	c3mmzA	Alignment	not modelled	74.3	12	PDB header: hydrolase Chain: A: PDB Molecule: putative had family hydrolase; PDBTitle: crystal structure of putative had family hydrolase from streptomyces2 avermitilis ma-4680
46	c3ewiB	Alignment	not modelled	72.0	8	PDB header: transferase Chain: B: PDB Molecule: n-acylneuramate cytidyltransferase; PDBTitle: structural analysis of the c-terminal domain of murine cmp-2 sialic acid synthetase
47	c3dnpA	Alignment	not modelled	71.9	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: stress response protein yhax; PDBTitle: crystal structure of stress response protein yhax from bacillus2 subtilis
48	c3mn1B	Alignment	not modelled	70.1	13	PDB header: hydrolase Chain: B: PDB Molecule: probable yrbi family phosphatase; PDBTitle: crystal structure of probable yrbi family phosphatase from pseudomonas2 syringae pv.phaseolica 1448a
49	d1xpja	Alignment	not modelled	59.8	15	Fold: HAD-like Superfamily: HAD-like Family: Hypothetical protein VC0232
50	c2r8zC	Alignment	not modelled	59.0	12	PDB header: hydrolase Chain: C: PDB Molecule: 3-deoxy-d-manno-octulosonate 8-phosphate phosphatase; PDBTitle: crystal structure of yrbi phosphatase from escherichia coli in complex2 with a phosphate and a calcium ion
51	c3n07B	Alignment	not modelled	53.6	12	PDB header: hydrolase Chain: B: PDB Molecule: 3-deoxy-d-manno-octulosonate 8-phosphate phosphatase; PDBTitle: structure of putative 3-deoxy-d-manno-octulosonate 8-phosphate2 phosphatase from vibrio cholerae
52	c1xviA	Alignment	not modelled	46.3	13	PDB header: hydrolase Chain: A: PDB Molecule: putative mannosyl-3-phosphoglycerate phosphatase; PDBTitle: crystal structure of yedp, phosphatase-like domain protein2 from escherichia coli k12
53	d1xvia	Alignment	not modelled	46.3	13	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
						Fold: HAD-like

54	d1s2oa1	Alignment	not modelled	43.4	12	Superfamily: HAD-like Family: Predicted hydrolases Cof
55	c3daoB	Alignment	not modelled	39.5	16	PDB header: hydrolase Chain: B: PDB Molecule: putative phosphatse; PDBTitle: crystal structure of a putative phosphatse (eubrec_1417) from2 eubacterium rectale at 1.80 a resolution
56	c3gygA	Alignment	not modelled	38.6	15	PDB header: hydrolase Chain: A: PDB Molecule: ntd biosynthesis operon putative hydrolase ntdb; PDBTitle: crystal structure of yhjk (haloacid dehalogenase-like hydrolase2 protein) from bacillus subtilis
57	d2fw2a1	Alignment	not modelled	37.2	13	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Crotonase-like
58	c3tdmD	Alignment	not modelled	36.3	16	PDB header: de novo protein Chain: D: PDB Molecule: computationally designed two-fold symmetric tim-barrel PDBTitle: computationally designed tim-barrel protein, halfflr
59	d2obba1	Alignment	not modelled	34.9	7	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
60	d1nzya	Alignment	not modelled	31.3	9	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Crotonase-like
61	c2b8eB	Alignment	not modelled	31.0	24	PDB header: membrane protein Chain: B: PDB Molecule: cation-transporting atpase; PDBTitle: copa atp binding domain
62	d1p3y1	Alignment	not modelled	30.2	13	Fold: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Superfamily: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Family: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
63	c2i55C	Alignment	not modelled	27.7	20	PDB header: isomerase Chain: C: PDB Molecule: phosphomannomutase; PDBTitle: complex of glucose-1,6-bisphosphate with phosphomannomutase from2 leishmania mexicana
64	c2fbmB	Alignment	not modelled	27.0	11	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: y chromosome chromodomain protein 1, telomeric isoform b; PDBTitle: acetyltransferase domain of cdy1
65	d1y1pa1	Alignment	not modelled	25.6	18	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
66	d2b30a1	Alignment	not modelled	24.4	20	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
67	c3j09A	Alignment	not modelled	24.1	21	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
68	c3niwA	Alignment	not modelled	23.2	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: haloacid dehalogenase-like hydrolase; PDBTitle: crystal structure of a haloacid dehalogenase-like hydrolase from2 bacteroides thetaiotaomicron
69	c2qyhD	Alignment	not modelled	23.1	16	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: hypothetical conserved protein, gk1056; PDBTitle: crystal structure of the hypothetical protein (gk1056) from2 geobacillus kaustophilus hta426
70	c3j08A	Alignment	not modelled	23.0	23	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
71	c2dlnA	Alignment	not modelled	22.2	28	PDB header: ligase(peptidoglycan synthesis) Chain: A: PDB Molecule: d-alanine--d-alanine ligase; PDBTitle: vancomycin resistance: structure of d-alanine:d-alanine2 ligase at 2.3 angstroms resolution
72	d2b8ea1	Alignment	not modelled	21.6	24	Fold: HAD-like Superfamily: HAD-like Family: Meta-cation ATPase, catalytic domain P
73	d1m5wa	Alignment	not modelled	21.3	15	Fold: TIM beta/alpha-barrel Superfamily: Pyridoxine 5'-phosphate synthase Family: Pyridoxine 5'-phosphate synthase
74	d1g5qa	Alignment	not modelled	20.8	16	Fold: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Superfamily: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Family: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
75	d1wpga2	Alignment	not modelled	19.8	20	Fold: HAD-like Superfamily: HAD-like Family: Meta-cation ATPase, catalytic domain P
76	d2r8oa2	Alignment	not modelled	19.8	7	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: TK-like PP module
77	c2dwcB	Alignment	not modelled	18.7	33	PDB header: transferase Chain: B: PDB Molecule: 433aa long hypothetical phosphoribosylglycinamide formyl PDBTitle: crystal structure of probable phosphoribosylglycinamide formyl2 transferase from pyrococcus horikoshii ot3 complexed with adp
78	c3r4cA	Alignment	not modelled	18.3	18	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, haloacid dehalogenase-like hydrolase; PDBTitle: divergence of structure and function among phosphatases of the2 haloalkanoate (had) enzyme superfamily:

					analysis of bt1666 from3 bacteroides thetaiotaomicron
79	c2cunA_	Alignment	not modelled	18.2	14 PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from pyrococcus2 horikoshii ot3
80	d1rlma_	Alignment	not modelled	17.7	19 Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
81	dliowa1	Alignment	not modelled	17.4	26 Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: D-Alanine ligase N-terminal domain
82	c3n1uA_	Alignment	not modelled	17.3	10 PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, had superfamily, subfamily iii a; PDBTitle: structure of putative had superfamily (subfamily iii a) hydrolase from2 legionella pneumophila
83	d1a9xa3	Alignment	not modelled	17.2	23 Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
84	c3bq9A_	Alignment	not modelled	17.1	11 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted rossmann fold nucleotide-binding domain- PDBTitle: crystal structure of predicted nucleotide-binding protein from2 idiomarina baltica os145
85	d2zdra2	Alignment	not modelled	16.6	21 Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: NeuB-like
86	d1rkqa_	Alignment	not modelled	15.8	20 Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
87	c3cetA_	Alignment	not modelled	15.7	15 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved archaeal protein; PDBTitle: crystal structure of the pantheonate kinase-like protein2 q6m145 at the resolution 1.8 a. northeast structural3 genomics consortium target mrr63
88	d1ovma1	Alignment	not modelled	15.7	10 Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
89	d1jvna1	Alignment	not modelled	14.7	14 Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Histidine biosynthesis enzymes
90	c2gsjA_	Alignment	not modelled	14.4	33 PDB header: hydrolase Chain: A: PDB Molecule: protein ppl-2; PDBTitle: cdna cloning and 1.75a crystal structure determination of2 ppl2, a novel chimerolectin from parkia platycephala seeds3 exhibiting endochitinolytic activity
91	d2fts3	Alignment	not modelled	14.4	14 Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
92	c3q3vA_	Alignment	not modelled	14.3	14 PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from campylobacter2 jejuni.
93	c3iz5K_	Alignment	not modelled	13.6	32 PDB header: ribosome Chain: K: PDB Molecule: 60s ribosomal protein l13a (l13p); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
94	c3mcf_	Alignment	not modelled	13.1	25 PDB header: oxidoreductase Chain: F: PDB Molecule: dipicolinate synthase, b chain; PDBTitle: crystal structure of the dipicolinate synthase chain b from2 bacillus cereus. northeast structural genomics consortium3 target bcr215.
95	d1u02a_	Alignment	not modelled	13.1	17 Fold: HAD-like Superfamily: HAD-like Family: Trehalose-phosphatase
96	d1nrwa_	Alignment	not modelled	12.5	16 Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
97	c3r6hA_	Alignment	not modelled	12.4	10 PDB header: lyase Chain: A: PDB Molecule: enoyl-coa hydratase, echa3; PDBTitle: crystal structure of an enoyl-coa hydratase (echa3) from mycobacterium2 marinum
98	c3lqkA_	Alignment	not modelled	12.1	28 PDB header: oxidoreductase Chain: A: PDB Molecule: dipicolinate synthase subunit b; PDBTitle: crystal structure of dipicolinate synthase subunit b from bacillus2 halodurans c
99	d1vega_	Alignment	not modelled	11.8	11 Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain