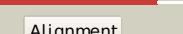
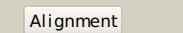
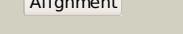
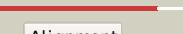


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0AEW9
Date	Thu Jan 5 11:24:29 GMT 2012
Unique Job ID	20e44c2865610ba1

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2jg1C_	Alignment		100.0	25	PDB header: transferase Chain: C; PDB Molecule: tagatose-6-phosphate kinase; PDBTitle: structure of staphylococcus aureus d-tagatose-6-phosphate2 kinase with cofactor and substrate
2	c2jg5B_	Alignment		100.0	29	PDB header: transferase Chain: B; PDB Molecule: fructose 1-phosphate kinase; PDBTitle: crystal structure of a putative phosphofructokinase from2 staphylococcus aureus
3	d2f02a1	Alignment		100.0	25	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
4	c3cqdB_	Alignment		100.0	28	PDB header: transferase Chain: B; PDB Molecule: 6-phosphofructokinase isozyme 2; PDBTitle: structure of the tetrameric inhibited form of2 phosphofructokinase-2 from escherichia coli
5	d2abqa1	Alignment		100.0	28	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
6	d2ajra1	Alignment		100.0	24	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
7	c3jula_	Alignment		100.0	27	PDB header: transferase Chain: A; PDB Molecule: lin2199 protein; PDBTitle: crystal structure of listeria innocua d-tagatose-6-phosphate2 kinase bound with substrate
8	d1rkda_	Alignment		100.0	21	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
9	d1vm7a_	Alignment		100.0	23	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
10	c3kzhA_	Alignment		100.0	21	PDB header: transferase Chain: A; PDB Molecule: probable sugar kinase; PDBTitle: crystal structure of a putative sugar kinase from2 clostridium perfringens
11	c3pl2D_	Alignment		100.0	21	PDB header: transferase Chain: D; PDB Molecule: sugar kinase, ribokinase family; PDBTitle: crystal structure of a 5-keto-2-deoxygluconokinase (ncgl0155, cgl0158)2 from corynebacterium glutamicum atcc 13032 kitasato at 1.89 a3 resolution

12	c2rbcA	 Alignment		100.0	19	PDB header: transferase Chain: A; PDB Molecule: sugar kinase; PDBTitle: crystal structure of a putative ribokinase from agrobacterium2 tumefaciens
13	c2nwhA	 Alignment		100.0	18	PDB header: signaling protein,transferase Chain: A; PDB Molecule: carbohydrate kinase; PDBTitle: carbohydrate kinase from agrobacterium tumefaciens
14	d1bx4a	 Alignment		100.0	17	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
15	c2pkkA	 Alignment		100.0	20	PDB header: transferase Chain: A; PDB Molecule: adenosine kinase; PDBTitle: crystal structure of m tuberculosis adenosine kinase complexed with 2-2 fluro adenosine
16	c3go6B	 Alignment		100.0	24	PDB header: transferase Chain: B; PDB Molecule: ribokinase rbsk; PDBTitle: crystal structure of m. tuberculosis ribokinase (rv2436) in2 complex with ribose and amp-pnp
17	c2xtbA	 Alignment		100.0	16	PDB header: transferase Chain: A; PDB Molecule: adenosine kinase; PDBTitle: crystal structure of trypanosoma brucei rhodesiense2 adenosine kinase complexed with activator
18	c2qcvA	 Alignment		100.0	19	PDB header: transferase Chain: A; PDB Molecule: putative 5-dehydro-2-deoxygluconokinase; PDBTitle: crystal structure of a putative 5-dehydro-2-deoxygluconokinase (iolc)2 from bacillus halodurans c-125 at 1.90 a resolution
19	c2c49A	 Alignment		100.0	14	PDB header: transferase Chain: A; PDB Molecule: sugar kinase mj0406; PDBTitle: crystal structure of methanocaldococcus jannaschii2 nucleoside kinase - an archaeal member of the ribokinase3 family
20	d1v19a	 Alignment		100.0	24	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
21	c3looC	 Alignment	not modelled	100.0	15	PDB header: transferase Chain: C; PDB Molecule: anopheles gambiae adenosine kinase; PDBTitle: crystal structure of anopheles gambiae adenosine kinase in complex2 with p1,p4-di(adenosine-5') tetraphosphate
22	c3iq0B	 Alignment	not modelled	100.0	19	PDB header: transferase Chain: B; PDB Molecule: putative ribokinase ii; PDBTitle: crystal structure of a putative ribokinase ii in complex2 with atp and mg+2 from e.coli
23	d2fv7a1	 Alignment	not modelled	100.0	21	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
24	c3in1A	 Alignment	not modelled	100.0	20	PDB header: transferase Chain: A; PDB Molecule: uncharacterized sugar kinase ydjh; PDBTitle: crystal structure of a putative ribokinase in complex with2 adp from e.coli
25	c3b1qD	 Alignment	not modelled	100.0	19	PDB header: transferase Chain: D; PDB Molecule: ribokinase, putative; PDBTitle: structure of burkholderia thailandensis nucleoside kinase (bthnk) in2 complex with inosine
26	d2afba1	 Alignment	not modelled	100.0	17	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
27	c3i3yB	 Alignment	not modelled	100.0	20	PDB header: transferase Chain: B; PDB Molecule: carbohydrate kinase; PDBTitle: crystal structure of ribokinase in complex with d-ribose from2 klebsiella pneumoniae
28	d2absa1	 Alignment	not modelled	100.0	21	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
						PDB header: signaling protein,transferase

29	c2absA	Alignment	not modelled	100.0	21	Chain: A: PDB Molecule: adenosine kinase; PDBTitle: crystal structure of t. gondii adenosine kinase complexed2 with amp-ppc
30	c3ktmA	Alignment	not modelled	100.0	16	PDB header: transferase Chain: A: PDB Molecule: carbohydrate kinase, pfkb family; PDBTitle: crystal structure of a putative 2-keto-3-deoxygluconate2 kinase from enterococcus faecalis
31	c2varB	Alignment	not modelled	100.0	15	PDB header: transferase Chain: B: PDB Molecule: fructokinase; PDBTitle: crystal structure of sulfolobus solfataricus 2-keto-3-2 deoxygluconate kinase complexed with 2-keto-3-3 deoxygluconate
32	d2dcna1	Alignment	not modelled	100.0	16	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
33	c3bf5A	Alignment	not modelled	100.0	17	PDB header: transferase Chain: A: PDB Molecule: ribokinase related protein; PDBTitle: crystal structure of putative ribokinase (10640157) from thermoplasma2 acidophilum at 1.91 a resolution
34	c3b3IC	Alignment	not modelled	100.0	16	PDB header: transferase Chain: C: PDB Molecule: ketohexokinase; PDBTitle: crystal structures of alternatively-spliced isoforms of human2 ketohexokinase
35	d1tya	Alignment	not modelled	100.0	28	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
36	c3gbuD	Alignment	not modelled	100.0	19	PDB header: transferase Chain: D: PDB Molecule: uncharacterized sugar kinase ph1459; PDBTitle: crystal structure of an uncharacterized sugar kinase ph1459 from2 pyrococcus horikoshii in complex with atp
37	c3lhxA	Alignment	not modelled	100.0	18	PDB header: transferase Chain: A: PDB Molecule: ketodeoxygluconokinase; PDBTitle: crystal structure of a ketodeoxygluconokinase (kdkg) from2 shigella flexneri
38	c3lkiA	Alignment	not modelled	100.0	17	PDB header: transferase Chain: A: PDB Molecule: fructokinase; PDBTitle: crystal structure of fructokinase with bound atp from2 xylella fastidiosa
39	c2qhpA	Alignment	not modelled	100.0	19	PDB header: transferase Chain: A: PDB Molecule: fructokinase; PDBTitle: crystal structure of fructokinase (np_810670.1) from bacteroides2 thetaiotomicron vpi-5482 at 1.80 a resolution
40	c1tz6B	Alignment	not modelled	100.0	29	PDB header: transferase Chain: B: PDB Molecule: putative sugar kinase; PDBTitle: crystal structure of aminoimidazole riboside kinase from2 salmonella enterica complexed with aminoimidazole riboside3 and atp analog
41	c3kd6B	Alignment	not modelled	100.0	19	PDB header: transferase Chain: B: PDB Molecule: carbohydrate kinase, pfkb family; PDBTitle: crystal structure of nucleoside kinase from chlorobium tepidum in2 complex with amp
42	d1vk4a	Alignment	not modelled	100.0	17	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Ribokinase-like
43	c3hj6B	Alignment	not modelled	100.0	21	PDB header: transferase Chain: B: PDB Molecule: fructokinase; PDBTitle: structure of halothermothrix orenii fructokinase (frk)
44	c2ddmA	Alignment	not modelled	99.9	20	PDB header: transferase Chain: A: PDB Molecule: pyridoxine kinase; PDBTitle: crystal structure of pyridoxal kinase from the escherichia2 coli pdxk gene at 2.1 a resolution
45	d1vi9a	Alignment	not modelled	99.8	24	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: PfkB-like kinase
46	c3mbjA	Alignment	not modelled	99.8	16	PDB header: transferase Chain: A: PDB Molecule: putative phosphomethylpyrimidine kinase; PDBTitle: crystal structure of a putative phosphomethylpyrimidine kinase2 (bt_4458) from bacteroides thetaiotomicron vpi-5482 at 2.10 a3 resolution (rhombohedral form)
47	d1lhpA	Alignment	not modelled	99.8	17	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: PfkB-like kinase
48	d1ub0a	Alignment	not modelled	99.7	23	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Thiamin biosynthesis kinases
49	c2i5bC	Alignment	not modelled	99.7	19	PDB header: transferase Chain: C: PDB Molecule: phosphomethylpyrimidine kinase; PDBTitle: the crystal structure of an adp complex of bacillus2 subtilis pyridoxal kinase provides evidence for the3 parallel emergence of enzyme activity during evolution
50	c3ibqA	Alignment	not modelled	99.7	18	PDB header: transferase Chain: A: PDB Molecule: pyridoxal kinase; PDBTitle: crystal structure of pyridoxal kinase from lactobacillus2 plantarum in complex with atp
51	c3rm5B	Alignment	not modelled	99.6	15	PDB header: transferase Chain: B: PDB Molecule: hydroxymethylpyrimidine/phosphomethylpyrimidine kinase PDBTitle: structure of trifunctional thi20 from yeast
52	c3dzvB	Alignment	not modelled	99.5	14	PDB header: transferase Chain: B: PDB Molecule: 4-methyl-5-(beta-hydroxyethyl)thiazole kinase; PDBTitle: crystal structure of 4-methyl-5-(beta-hydroxyethyl)thiazole2 kinase (np_816404.1) from enterococcus faecalis v583 at 3.2.57 a resolution
53	d1v8aa	Alignment	not modelled	99.4	10	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Thiamin biosynthesis kinases

54	d1jxha		Alignment	not modelled	99.4	19	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Thiamin biosynthesis kinases
55	d1kyha		Alignment	not modelled	99.2	16	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: YjeF C-terminal domain-like
56	d2ax3a1		Alignment	not modelled	99.0	15	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: YjeF C-terminal domain-like
57	d1ekqa		Alignment	not modelled	99.0	16	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: Thiamin biosynthesis kinases
58	c2ax3A		Alignment	not modelled	98.9	14	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein tm0922; PDBTitle: crystal structure of a putative carbohydrate kinase (tm0922) from thermotoga maritima msb8 at 2.25 a resolution
59	d1gc5a		Alignment	not modelled	98.8	18	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: ADP-specific Phosphofructokinase/Glucokinase
60	c2r3ba		Alignment	not modelled	98.8	13	PDB header: transferase Chain: A: PDB Molecule: yje-related protein; PDBTitle: crystal structure of a ribokinase-like superfamily protein (ef1790)2 from enterococcus faecalis v583 at 1.80 a resolution
61	c3bgkA		Alignment	not modelled	98.7	14	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: the crystal structure of hypothetical protein smu_573 from streptococcus mutans
62	d1l2la		Alignment	not modelled	98.6	14	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: ADP-specific Phosphofructokinase/Glucokinase
63	d1ua4a		Alignment	not modelled	98.6	18	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: ADP-specific Phosphofructokinase/Glucokinase
64	c3nm3D		Alignment	not modelled	98.6	14	PDB header: transferase Chain: D: PDB Molecule: thiamine biosynthetic bifunctional enzyme; PDBTitle: the crystal structure of candida glabrata thi6, a bifunctional enzyme2 involved in thiamin biosynthesis of eukaryotes
65	d1u2xa		Alignment	not modelled	98.6	17	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: ADP-specific Phosphofructokinase/Glucokinase
66	c3drwA		Alignment	not modelled	98.5	16	PDB header: transferase Chain: A: PDB Molecule: adp-specific phosphofructokinase; PDBTitle: crystal structure of a phosphofructokinase from pyrococcus2 horikoshii ot3 with amp
67	c3k5wA		Alignment	not modelled	98.3	13	PDB header: transferase Chain: A: PDB Molecule: carbohydrate kinase; PDBTitle: crystal structure of a carbohydrate kinase (yje family)from2 helicobacter pylori
68	c3k96B		Alignment	not modelled	58.2	14	PDB header: oxidoreductase Chain: B: PDB Molecule: glycerol-3-phosphate dehydrogenase [nad(p)+]; PDBTitle: 2.1 angstrom resolution crystal structure of glycerol-3-phosphate2 dehydrogenase (gpsa) from coxiella burnetii
69	c2vawA		Alignment	not modelled	49.6	11	PDB header: cell cycle Chain: A: PDB Molecule: cell division protein ftsz; PDBTitle: ftsz pseudomonas aeruginosa gdp
70	d1djqa2		Alignment	not modelled	44.4	15	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: C-terminal domain of adrenodoxin reductase-like
71	c3d8xB		Alignment	not modelled	43.1	16	PDB header: oxidoreductase Chain: B: PDB Molecule: thioredoxin reductase 1; PDBTitle: crystal structure of saccharomyces cerevisiae nadph dependent2 thioredoxin reductase 1
72	d1ofual		Alignment	not modelled	38.1	11	Fold: Tubulin nucleotide-binding domain-like Superfamily: Tubulin nucleotide-binding domain-like Family: Tubulin, GTPase domain
73	d2d5ba2		Alignment	not modelled	32.0	12	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
74	c2dlnA		Alignment	not modelled	31.9	20	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
75	d1d7ya1		Alignment	not modelled	31.8	18	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
76	d1rq2a1		Alignment	not modelled	31.2	18	Fold: Tubulin nucleotide-binding domain-like Superfamily: Tubulin nucleotide-binding domain-like Family: Tubulin, GTPase domain
77	d2obba1		Alignment	not modelled	30.7	8	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
78	c1gqqA		Alignment	not modelled	28.4	14	PDB header: cell wall biosynthesis Chain: A: PDB Molecule: udp-n-acetyl muramate-l-alanine ligase; PDBTitle: murc - crystal structure of the apo-enzyme from haemophilus2 influenzae
79	c1u5tB		Alignment	not modelled	27.4	14	PDB header: transport protein Chain: B: PDB Molecule: defective in vacuolar protein sorting; vps36p; PDBTitle: structure of the escrt-ii endosomal trafficking complex

80	c1ofuB_	Alignment	not modelled	27.4	11	PDB header: bacterial cell division inhibitor Chain: B; PDB Molecule: cell division protein ftsz; PDBTitle: crystal structure of sula:ftsz from pseudomonas aeruginosa
81	c1w7pD_	Alignment	not modelled	27.3	14	PDB header: protein transport Chain: D; PDB Molecule: vps36p, ylr417w; PDBTitle: the crystal structure of endosomal complex escrt-ii2 (vps22/vps25/vps36)
82	c3sc6F_	Alignment	not modelled	25.7	23	PDB header: oxidoreductase Chain: F; PDB Molecule: dtdp-4-dehydrorhamnose reductase; PDBTitle: 2.65 angstrom resolution crystal structure of dtdp-4-dehydrorhamnose2 reductase (rfbd) from bacillus anthracis str. Ames in complex with3 nadp
83	d1nhpa2	Alignment	not modelled	23.6	28	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
84	c1w59B_	Alignment	not modelled	22.5	14	PDB header: cell division Chain: B; PDB Molecule: cell division protein ftsz homolog 1; PDBTitle: ftsz dimer, empty (m. jannaschii)
85	c2zj3A_	Alignment	not modelled	20.5	9	PDB header: transferase Chain: A; PDB Molecule: glucosamine--fructose-6-phosphate PDBTitle: isomerase domain of human glucose:fructose-6-phosphate2 amidotransferase
86	c1v59B_	Alignment	not modelled	20.2	29	PDB header: oxidoreductase Chain: B; PDB Molecule: dihydrolipoamide dehydrogenase; PDBTitle: crystal structure of yeast lipoamide dehydrogenase2 complexed with nad+
87	c3crcB_	Alignment	not modelled	19.7	19	PDB header: hydrolase Chain: B; PDB Molecule: protein mazg; PDBTitle: crystal structure of escherichia coli mazg, the regulator2 of nutritional stress response
88	d2vapa1	Alignment	not modelled	19.2	16	Fold: Tubulin nucleotide-binding domain-like Superfamily: Tubulin nucleotide-binding domain-like Family: Tubulin, GTPase domain
89	d1y5ea1	Alignment	not modelled	18.7	18	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MogA-like
90	c2puwA_	Alignment	not modelled	18.2	13	PDB header: transferase Chain: A; PDB Molecule: isomerase domain of glutamine-fructose-6-phosphate PDBTitle: the crystal structure of isomerase domain of glucosamine-6-phosphate2 synthase from candida albicans
91	c2f00A_	Alignment	not modelled	17.2	12	PDB header: ligase Chain: A; PDB Molecule: udp-n-acetyl muramate--l-alanine ligase; PDBTitle: escherichia coli murc
92	d1ztda1	Alignment	not modelled	16.7	20	Fold: RNase III domain-like Superfamily: RNase III domain-like Family: PF0609-like
93	d1w5fa1	Alignment	not modelled	16.3	14	Fold: Tubulin nucleotide-binding domain-like Superfamily: Tubulin nucleotide-binding domain-like Family: Tubulin, GTPase domain
94	d1p3da1	Alignment	not modelled	15.9	17	Fold: MurCD N-terminal domain Superfamily: MurCD N-terminal domain Family: MurCD N-terminal domain
95	c2nm0B_	Alignment	not modelled	15.9	35	PDB header: oxidoreductase Chain: B; PDB Molecule: probable 3-oxacyl-(acyl-carrier-protein) reductase; PDBTitle: crystal structure of sco1815: a beta-ketoacyl-acyl carrier protein2 reductase from streptomyces coelicolor a3(2)
96	d2gtad1	Alignment	not modelled	15.4	15	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
97	c2gr2A_	Alignment	not modelled	13.9	25	PDB header: oxidoreductase Chain: A; PDB Molecule: ferredoxin reductase; PDBTitle: crystal structure of ferredoxin reductase, bpha4 (oxidized form)
98	d1ml4a2	Alignment	not modelled	13.9	9	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
99	c2is8A_	Alignment	not modelled	13.8	9	PDB header: structural protein Chain: A; PDB Molecule: molybdopterin biosynthesis enzyme, moab; PDBTitle: crystal structure of the molybdopterin biosynthesis enzyme moab2 (ttha0341) from thermus theromophilus hb8