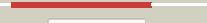
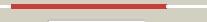
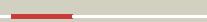


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P45753
Date	Thu Jan 5 12:03:31 GMT 2012
Unique Job ID	e72905b5915ea42b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2ychA	 Alignment		100.0	20	PDB header: cell cycle Chain: A: PDB Molecule: competence protein pilm; PDBTitle: pilm-piln type iv pilus biogenesis complex
2	d1e4ft1	 Alignment		99.7	12	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
3	d2bh1a2	 Alignment		99.7	14	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Cyto-EpsL domain
4	c1e4gT	 Alignment		99.6	9	PDB header: bacterial cell division Chain: T: PDB Molecule: cell division protein ftsa; PDBTitle: ftsa (atp-bound form) from thermotoga maritima
5	c1yf5L	 Alignment		99.4	16	PDB header: transport protein Chain: L: PDB Molecule: general secretion pathway protein I; PDBTitle: cyto-epsL: the cytoplasmic domain of epsl, an inner membrane component2 of the type ii secretion system of vibrio cholerae
6	c3h1qB	 Alignment		99.1	15	PDB header: structural protein Chain: B: PDB Molecule: ethanolamine utilization protein eutj; PDBTitle: crystal structure of ethanolamine utilization protein eutj from2 carboxydotermus hydrogenoformans
7	d2p3ra1	 Alignment		96.9	16	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glycerol kinase
8	c3ezwD	 Alignment		96.8	16	PDB header: transferase Chain: D: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of a hyperactive escherichia coli glycerol kinase2 mutant gly230 --> asp obtained using microfluidic crystallization3 devices
9	c3ifrB	 Alignment		96.8	14	PDB header: transferase Chain: B: PDB Molecule: carbohydrate kinase, fgyy; PDBTitle: the crystal structure of xylulose kinase from rhodospirillum rubrum
10	c3g25B	 Alignment		96.8	11	PDB header: transferase Chain: B: PDB Molecule: glycerol kinase; PDBTitle: 1.9 angstrom crystal structure of glycerol kinase (glpk) from2 staphylococcus aureus in complex with glycerol.
11	c3flcX	 Alignment		96.6	10	PDB header: transferase Chain: X: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of the his-tagged h232r mutant of glycerol kinase2 from enterococcus casseliflavus with glycerol

12	c2zf50		96.5	8	PDB header: transferase Chain: O: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of highly thermostable glycerol kinase from a2 hyperthermophilic archaeon	
13	c3h6eB		96.5	12	PDB header: transferase Chain: B: PDB Molecule: carbohydrate kinase, fgyg; PDBTitle: the crystal structure of a carbohydrate kinase from novosphingobium2 aromaticivorans	
14	c2nlxA		96.5	12	PDB header: transferase Chain: A: PDB Molecule: xylulose kinase; PDBTitle: crystal structure of the apo e. coli xylulose kinase	
15	c3i8bA		96.4	13	PDB header: transferase Chain: A: PDB Molecule: xylulose kinase; PDBTitle: the crystal structure of xylulose kinase from2 bifidobacterium adolescentis	
16	c2d4wA		96.4	8	PDB header: transferase Chain: A: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of glycerol kinase from cellulomonas sp.2 nt3060	
17	c3gbtA		96.4	11	PDB header: transferase Chain: A: PDB Molecule: gluconate kinase; PDBTitle: crystal structure of gluconate kinase from lactobacillus acidophilus	
18	c1glbG		96.1	14	PDB header: phosphotransferase Chain: G: PDB Molecule: glycerol kinase; PDBTitle: structure of the regulatory complex of escherichia coli iiiglc with2 glycerol kinase	
19	c3gg4B		96.1	10	PDB header: transferase Chain: B: PDB Molecule: glycerol kinase; PDBTitle: the crystal structure of glycerol kinase from yersinia2 pseudotuberculosis	
20	c3hz6A		96.1	15	PDB header: transferase Chain: A: PDB Molecule: xylulokinase; PDBTitle: crystal structure of xylulokinase from chromobacterium violaceum	
21	c2dpnB		not modelled	95.8	14	PDB header: transferase Chain: B: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of the glycerol kinase from thermus2 thermophilus hb8
22	c2w40C		not modelled	94.9	8	PDB header: transferase Chain: C: PDB Molecule: glycerol kinase, putative; PDBTitle: crystal structure of plasmodium falciparum glycerol kinase2 with bound glycerol
23	c2cgkB		not modelled	94.7	8	PDB header: transferase Chain: B: PDB Molecule: l-rhamnulose kinase; PDBTitle: crystal structure of l-rhamnulose kinase from escherichia2 coli in an open uncomplexed conformation.
24	c3jvpA		not modelled	94.6	13	PDB header: transferase Chain: A: PDB Molecule: ribulokinase; PDBTitle: crystal structure of ribulokinase from bacillus halodurans
25	c1xupO		not modelled	94.5	10	PDB header: transferase Chain: O: PDB Molecule: glycerol kinase; PDBTitle: enterococcus casseliflavus glycerol kinase complexed with glycerol
26	d1u6za2		not modelled	93.8	9	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Ppx/GppA phosphatase
27	d1t6ca1		not modelled	93.6	5	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Ppx/GppA phosphatase
28	d2aa4a1		not modelled	93.5	13	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
					Fold: Ribonuclease H-like motif	

29	d1r59o1		not modelled	93.0	11	Superfamily: Actin-like ATPase domain Family: Glycerol kinase
30	d2ap1a2		not modelled	92.9	8	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
31	d1woqa1		not modelled	92.3	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
32	d1q18a1		not modelled	92.2	6	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glucokinase
33	d1z6ra2		not modelled	92.1	12	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
34	c3htvA_		not modelled	91.9	13	PDB header: transferase Chain: A: PDB Molecule: d-allose kinase; PDBTitle: crystal structure of d-allose kinase (np_418508.1) from escherichia2 coli k12 at 1.95 a resolution
35	d2hoea3		not modelled	91.5	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
36	c3iucC_		not modelled	91.1	8	PDB header: chaperone Chain: C: PDB Molecule: heat shock 70kda protein 5 (glucose-regulated PDBTitle: crystal structure of the human 70kda heat shock protein 52 (bip/grp78) atpase domain in complex with adp
37	c2g2rA_		not modelled	90.9	8	PDB header: transferase Chain: A: PDB Molecule: glucokinase 1, putative; PDBTitle: trypanosoma cruzi glucokinase in complex with beta-d-glucose and adp
38	d1z05a3		not modelled	90.8	10	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
39	c2ap1A_		not modelled	89.7	9	PDB header: transferase Chain: A: PDB Molecule: putative regulator protein; PDBTitle: crystal structure of the putative regulatory protein
40	d2ewsa1		not modelled	89.2	10	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Fumble-like
41	d1zc6a1		not modelled	88.0	13	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
42	c3r8eA_		not modelled	87.4	9	PDB header: transferase Chain: A: PDB Molecule: hypothetical sugar kinase; PDBTitle: crystal structure of a hypothetical sugar kinase (chu_1875) from2 cytophaga hutchinsonii atcc 33406 at 1.65 a resolution
43	c1z6rC_		not modelled	85.3	11	PDB header: transcription Chain: C: PDB Molecule: mlc protein; PDBTitle: crystal structure of mlc from escherichia coli
44	c1zc6A_		not modelled	84.4	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: probable n-acetylglucosamine kinase; PDBTitle: crystal structure of putative n-acetylglucosamine kinase from2 chromobacterium violaceum. northeast structural genomics target3 cvr23.
45	c1z05A_		not modelled	83.3	10	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, rok family; PDBTitle: crystal structure of the rok family transcriptional regulator, homolog2 of e.coli mlc protein.
46	d1huxa_		not modelled	80.8	7	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
47	c3hi0B_		not modelled	79.5	9	PDB header: hydrolase Chain: B: PDB Molecule: putative exopolyphosphatase; PDBTitle: crystal structure of putative exopolyphosphatase (17739545) from2 agrobacterium tumefaciens str. c58 (dupont) at 2.30 a resolution
48	c1woqB_		not modelled	79.4	11	PDB header: transferase Chain: B: PDB Molecule: inorganic polyphosphate/atp-glucosaminokinase; PDBTitle: crystal structure of inorganic polyphosphate/atp-glucosaminokinase from2 arthrobacter sp. strain km at 1.8 a resolution
49	c1t6dB_		not modelled	79.0	3	PDB header: hydrolase Chain: B: PDB Molecule: exopolyphosphatase; PDBTitle: miras phasing of the aquifex aeolicus ppx/gppa phosphatase: crystal2 structure of the type ii variant
50	c2e2pA_		not modelled	78.3	9	PDB header: transferase Chain: A: PDB Molecule: hexokinase; PDBTitle: crystal structure of sulfolobus tokodaii hexokinase in2 complex with adp
51	c3mdqA_		not modelled	77.8	11	PDB header: hydrolase Chain: A: PDB Molecule: exopolyphosphatase; PDBTitle: crystal structure of an exopolyphosphatase (chu_0316) from cytophaga2 hutchinsonii atcc 33406 at 1.50 a resolution
52	c2qm1D_		not modelled	77.0	9	PDB header: transferase Chain: D: PDB Molecule: glucokinase; PDBTitle: crystal structure of glucokinase from enterococcus faecalis
53	c2floA_		not modelled	76.4	9	PDB header: hydrolase Chain: A: PDB Molecule: exopolyphosphatase; PDBTitle: crystal structure of exopolyphosphatase (ppx) from e. coli o157:h7
						PDB header: transferase Chain: B: PDB Molecule: putative n-acetylmannosamine kinase;

54	c2aa4B_	Alignment	not modelled	74.6	14	PDBTitle: crystal structure of escherichia coli putative n-2 acetylmannosamine kinase, new york structural genomics cs3 consortium
55	d2gupa1	Alignment	not modelled	72.7	10	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
56	d1sz2a1	Alignment	not modelled	71.6	5	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glucokinase
57	d1jcea1	Alignment	not modelled	71.2	19	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
58	c2hoeA_	Alignment	not modelled	68.9	11	PDB header: transferase Chain: A: PDB Molecule: n-acetylglucosamine kinase; PDBTitle: crystal structure of n-acetylglucosamine kinase (tm1224) from2 thermotoga maritima at 2.46 a resolution
59	c2ch5D_	Alignment	not modelled	68.7	11	PDB header: transferase Chain: D: PDB Molecule: nagk protein; PDBTitle: crystal structure of human n-acetylglucosamine kinase in2 complex with n-acetylglucosamine
60	c3cerD_	Alignment	not modelled	68.6	11	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: possible exopolyphosphatase-like protein; PDBTitle: crystal structure of the exopolyphosphatase-like protein2 q8g5j2. northeast structural genomics consortium target3 blr13
61	c1jcgA_	Alignment	not modelled	67.7	18	PDB header: structural protein Chain: A: PDB Molecule: rod shape-determining protein mreb; PDBTitle: mreb from thermotoga maritima, amppnp
62	c2khoA_	Alignment	not modelled	66.0	19	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein 70; PDBTitle: nmr-rdc / xray structure of e. coli hsp70 (dnak) chaperone2 (1-605) complexed with adp and substrate
63	d1hjra_	Alignment	not modelled	60.6	5	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: RuvC resolvase
64	c2gupa_	Alignment	not modelled	60.5	10	PDB header: transferase Chain: A: PDB Molecule: rok family protein; PDBTitle: structural genomics, the crystal structure of a rok family protein2 from streptococcus pneumoniae tigr4 in complex with sucrose
65	c3mcpA_	Alignment	not modelled	58.4	25	PDB header: transferase Chain: A: PDB Molecule: glucokinase; PDBTitle: crystal structure of glucokinase (bdi_1628) from parabacteroides2 distasonis atcc 8503 at 3.00 a resolution
66	c3eo3B_	Alignment	not modelled	57.5	6	PDB header: isomerase, transferase Chain: B: PDB Molecule: bifunctional udp-n-acetylglucosamine 2-epimerase/n- PDBTitle: crystal structure of the n-acetylmannosamine kinase domain of human2 gne protein
67	d1bdga1	Alignment	not modelled	56.7	10	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
68	c1mwmA_	Alignment	not modelled	56.6	0	PDB header: structural protein Chain: A: PDB Molecule: parm; PDBTitle: parm from plasmid r1 adp form
69	d1cdwa2	Alignment	not modelled	54.1	19	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
70	d1qnna2	Alignment	not modelled	53.7	18	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
71	c3vgkB_	Alignment	not modelled	49.7	8	PDB header: transferase Chain: B: PDB Molecule: glucokinase; PDBTitle: crystal structure of a rok family glucokinase from streptomyces2 griseus
72	d1nbwa2	Alignment	not modelled	49.2	5	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ATPase domain of dehydratase reactivase alpha subunit
73	d2d0oa2	Alignment	not modelled	48.6	9	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ATPase domain of dehydratase reactivase alpha subunit
74	c1nbwA_	Alignment	not modelled	48.0	5	PDB header: hydrolase Chain: A: PDB Molecule: glycerol dehydratase reactivase alpha subunit; PDBTitle: glycerol dehydratase reactivase
75	c1xc3A_	Alignment	not modelled	47.3	9	PDB header: transferase Chain: A: PDB Molecule: putative fructokinase; PDBTitle: structure of a putative fructokinase from bacillus subtilis
76	c2v7zA_	Alignment	not modelled	45.8	17	PDB header: chaperone Chain: A: PDB Molecule: heat shock cognate 71 kda protein; PDBTitle: crystal structure of the 70-kda heat shock cognate protein2 from rattus norvegicus in post-atp hydrolysis state
77	d2ch5a2	Alignment	not modelled	45.7	9	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
78	c1hpmA_	Alignment	not modelled	43.5	16	PDB header: hydrolase (acting on acid anhydrides) Chain: A: PDB Molecule: 44k atpase fragment (n-terminal) of 70 kd heat- PDBTitle: how potassium affects the activity of the molecular2 chaperone hsc70. ii. potassium binds specifically in the3 atpase active site
79	c1bdgA_	Alignment	not modelled	41.2	10	PDB header: hexokinase Chain: A: PDB Molecule: hexokinase; PDBTitle: hexokinase from schistosoma mansoni complexed with

					glucose
80	d1czan3	Alignment	not modelled	40.2	14 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
81	d1mp9a1	Alignment	not modelled	37.0	16 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
82	d2fsja2	Alignment	not modelled	36.5	14 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Ta0583-like
83	d1nh2a2	Alignment	not modelled	33.6	18 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
84	d1bg3a3	Alignment	not modelled	32.7	7 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
85	d1xc3a1	Alignment	not modelled	32.4	13 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
86	d2f9wa2	Alignment	not modelled	29.8	18 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: CoaX-like
87	c2fsnB_	Alignment	not modelled	28.2	15 PDB header: structural protein Chain: B: PDB Molecule: hypothetical protein ta0583; PDBTitle: crystal structure of ta0583, an archaeal actin homolog, complex with2 adp
88	c3d2fcC_	Alignment	not modelled	27.7	9 PDB header: chaperone Chain: C: PDB Molecule: heat shock protein homolog sse1; PDBTitle: crystal structure of a complex of sse1p and hsp70
89	d1cdwa1	Alignment	not modelled	26.6	21 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
90	d1aisa2	Alignment	not modelled	26.0	19 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
91	d1mp9a2	Alignment	not modelled	24.7	21 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
92	d1czan1	Alignment	not modelled	23.9	12 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
93	d2e8aa1	Alignment	not modelled	23.7	21 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
94	d1dkgd1	Alignment	not modelled	23.6	16 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
95	d1aisa1	Alignment	not modelled	23.1	12 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
96	c2d0oA_	Alignment	not modelled	23.0	10 PDB header: chaperone Chain: A: PDB Molecule: diol dehydratase-reactivating factor large PDBTitle: strcuture of diol dehydratase-reactivating factor complexed2 with adp and mg2+
97	d1nh2a1	Alignment	not modelled	22.1	19 Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
98	d2zgya1	Alignment	not modelled	21.7	0 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
99	c3lm2B_	Alignment	not modelled	21.7	7 PDB header: transferase Chain: B: PDB Molecule: putative kinase; PDBTitle: crystal structure of putative kinase. (17743352) from agrobacterium2 tumefaciens str. c58 (dupont) at 1.70 a resolution