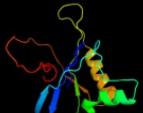
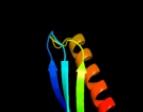


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P0A814
Date	Thu Jan 5 11:06:37 GMT 2012
Unique Job ID	4e8a98d360965542

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1hjra_	Alignment		100.0	100	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: RuvC resolvase
2	d1kcfa2	Alignment		98.5	18	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Mitochondrial resolvase ydc2 catalytic domain
3	d3bzka5	Alignment		98.3	18	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Tex RuvX-like domain-like
4	d1nu0a_	Alignment		98.1	17	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Putative Holliday junction resolvase RuvX
5	c1kcfB_	Alignment		98.1	18	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical 30.2 kd protein c25g10.02 in PDBTitle: crystal structure of the yeast mitochondrial holliday2 junction resolvase, ydc2
6	d1vhxa_	Alignment		97.7	17	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Putative Holliday junction resolvase RuvX
7	c2oceA_	Alignment		97.5	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pa5201; PDBTitle: crystal structure of tex family protein pa5201 from2 pseudomonas aeruginosa
8	d1iv0a_	Alignment		96.9	13	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Putative Holliday junction resolvase RuvX
9	c3r6mD_	Alignment		95.4	18	PDB header: hydrolase Chain: D: PDB Molecule: yeaz, resuscitation promoting factor; PDBTitle: crystal structure of vibrio parahaemolyticus yeaz
10	c3psiA_	Alignment		95.4	22	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of the spt6 core domain from saccharomyces2 cerevisiae, form spt6(239-1451)
11	d1zc6a1	Alignment		95.3	12	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like

12	d1okja1			95.2	19	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: YeaZ-like
13	c3psfA_			95.2	22	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of the spt6 core domain from <i>saccharomyces2 cerevisiae</i> , form spt6(236-1259)
14	c2ch5D_			95.2	18	PDB header: transferase Chain: D: PDB Molecule: nagk protein; PDBTitle: crystal structure of human n-acetylglucosamine kinase in2 complex with n-acetylglucosamine
15	c2e2pA_			94.9	20	PDB header: transferase Chain: A: PDB Molecule: hexokinase; PDBTitle: crystal structure of sulfolobus tokodaii hexokinase in2 complex with adp
16	c1zc6A_			94.3	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: probable n-acetylglucosamine kinase; PDBTitle: crystal structure of putative n-acetylglucosamine kinase from <i>chromobacterium violaceum</i> . northeast structural genomics target3 cvr23.
17	c2aa4B_			94.3	15	PDB header: transferase Chain: B: PDB Molecule: putative n-acetylmannosamine kinase; PDBTitle: crystal structure of <i>escherichia coli</i> putative n-2 acetylmannosamine kinase, new york structural genomics3 consortium
18	c3htvA_			93.6	18	PDB header: transferase Chain: A: PDB Molecule: d-allose kinase; PDBTitle: crystal structure of d-allose kinase (np_418508.1) from <i>escherichia2 coli</i> k12 at 1.95 a resolution
19	d2ch5a2			93.4	18	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
20	c1okjB_			93.2	20	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical protease yeaz; PDBTitle: crystal structure of the essential <i>e. coli</i> yeaz2 protein by mad method using the gadolinium complex3 "dotma"
21	c1xc3A_		not modelled	93.1	23	PDB header: transferase Chain: A: PDB Molecule: putative fructokinase; PDBTitle: structure of a putative fructokinase from <i>bacillus subtilis</i>
22	c3gbtA_		not modelled	93.0	21	PDB header: transferase Chain: A: PDB Molecule: gluconate kinase; PDBTitle: crystal structure of gluconate kinase from <i>lactobacillus acidophilus</i>
23	c2qm1D_		not modelled	92.1	16	PDB header: transferase Chain: D: PDB Molecule: glucokinase; PDBTitle: crystal structure of glucokinase from <i>enterococcus faecalis</i>
24	c3eo3B_		not modelled	91.5	15	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
25	d1saza1		not modelled	91.0	18	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Acetokinase-like
26	c2ivoC_		not modelled	90.1	15	PDB header: hydrolase Chain: C: PDB Molecule: up1; PDBTitle: structure of up1 protein
27	c1zbsA_		not modelled	89.4	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pg1100; PDBTitle: crystal structure of the putative n-acetylglucosamine kinase (pg1100)2 from <i>porphyromonas gingivalis</i> , northeast structural genomics target3 pgr18
28	c3mcpA		not modelled	89.3	18	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
29	c2w40C		Alignment	not modelled	89.1	16 PDB header: transferase Chain: C: PDB Molecule: glycerol kinase, putative; PDBTitle: crystal structure of plasmodium falciparum glycerol kinase2 with bound glycerol
30	c1e4gT		Alignment	not modelled	89.0	17 PDB header: bacterial cell division Chain: T: PDB Molecule: cell division protein ftsa; PDBTitle: ftsa (atp-bound form) from thermotoga maritima
31	c1z05A		Alignment	not modelled	89.0	12 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.
32	d2aa4a1		Alignment	not modelled	88.8	17 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
33	d1z05a3		Alignment	not modelled	88.8	14 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
34	c2a6aB		Alignment	not modelled	88.5	11 PDB header: hydrolase Chain: B: PDB Molecule: hypothetical protein tm0874; PDBTitle: crystal structure of glycoprotein endopeptidase (tm0874) from2 thermotoga maritima at 2.50 a resolution
35	d2a6aa1		Alignment	not modelled	88.5	11 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: YeaZ-like
36	c3enoB		Alignment	not modelled	88.4	17 PDB header: hydrolase/unknown function Chain: B: PDB Molecule: putative o-sialoglycoprotein endopeptidase; PDBTitle: crystal structure of pyrococcus furiosus pcc1 in complex2 with thermoplasma acidophilum kae1
37	d1z6ra2		Alignment	not modelled	88.2	9 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
38	c2gupA		Alignment	not modelled	88.1	20 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
39	c2v7yA		Alignment	not modelled	87.9	30 PDB header: chaperone Chain: A: PDB Molecule: chaperone protein dnak; PDBTitle: crystal structure of the molecular chaperone dnak from2 geobacillus kaustophilus hta426 in post-atp hydrolysis3 state
40	d2e1za1		Alignment	not modelled	87.8	17 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Acetokinase-like
41	c3i8bA		Alignment	not modelled	87.5	9 PDB header: transferase Chain: A: PDB Molecule: xylulose kinase; PDBTitle: the crystal structure of xylulose kinase from2 bifidobacterium adolescentis
42	d2e8aa1		Alignment	not modelled	87.3	31 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
43	d1huxa		Alignment	not modelled	86.8	11 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
44	c1z6rC		Alignment	not modelled	85.5	8 PDB header: transcription Chain: C: PDB Molecule: mlc protein; PDBTitle: crystal structure of mlc from escherichia coli
45	d2ap1a2		Alignment	not modelled	83.9	18 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
46	c3r8eA		Alignment	not modelled	83.7	18 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
47	c3vgkB		Alignment	not modelled	83.7	20 PDB header: transferase Chain: B: PDB Molecule: glucokinase; PDBTitle: crystal structure of a rok family glucokinase from streptomyces2 griseus
48	c2ap1A		Alignment	not modelled	82.2	19 PDB header: transferase Chain: A: PDB Molecule: putative regulator protein; PDBTitle: crystal structure of the putative regulatory protein
49	d2hoea3		Alignment	not modelled	82.2	15 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
50	c3ezkB		Alignment	not modelled	82.1	15 PDB header: hydrolase Chain: B: PDB Molecule: dna packaging protein gp17; PDBTitle: bacteriophage t4 gp17 motor assembly based on crystal2 structures and cryo-em reconstructions
51	d2gupa1		Alignment	not modelled	80.5	20 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
52	c3ifrB		Alignment	not modelled	77.0	15 PDB header: transferase Chain: B: PDB Molecule: carbohydrate kinase, fgg; PDBTitle: the crystal structure of xylulose kinase from rhodospirillum rubrum
53	c3gg4B		Alignment	not modelled	76.5	17 PDB header: transferase Chain: B: PDB Molecule: glycerol kinase; PDBTitle: the crystal structure of glycerol kinase from yersinia2 pseudotuberculosis
54	d1woqa1		Alignment	not modelled	76.3	18 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK

55	c1x3nA_	Alignment	not modelled	75.8	18	PDB header: transferase Chain: A: PDB Molecule: propionate kinase; PDBTitle: crystal structure of amppnp bound propionate kinase (tdcd) from2 salmonella typhimurium
56	c3h6eB_	Alignment	not modelled	75.5	13	PDB header: transferase Chain: B: PDB Molecule: carbohydrate kinase, fgyy; PDBTitle: the crystal structure of a carbohydrate kinase from novosphingobium2 aromaticivorans
57	c1woqB_	Alignment	not modelled	74.0	15	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
58	d1dkgd1	Alignment	not modelled	73.4	26	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
59	c2g2rA_	Alignment	not modelled	73.1	11	PDB header: transferase Chain: A: PDB Molecule: glucokinase 1, putative; PDBTitle: trypanosoma cruzi glucokinase in complex with beta-d-glucose and adp
60	d1bupa1	Alignment	not modelled	70.3	37	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
61	c3iucC_	Alignment	not modelled	67.8	27	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
62	c3p4iA_	Alignment	not modelled	67.6	13	PDB header: transferase Chain: A: PDB Molecule: acetate kinase; PDBTitle: crystal structure of acetate kinase from mycobacterium avium
63	c2zf5O_	Alignment	not modelled	64.9	14	PDB header: transferase Chain: O: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of highly thermostable glycerol kinase from a2 hyperthermophilic archaeon
64	d1xc3a1	Alignment	not modelled	63.3	24	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
65	c3hz6A_	Alignment	not modelled	62.2	11	PDB header: transferase Chain: A: PDB Molecule: xylulokinase; PDBTitle: crystal structure of xylulokinase from chromobacterium violaceum
66	c1zxoB_	Alignment	not modelled	59.9	19	PDB header: unknown function Chain: B: PDB Molecule: conserved hypothetical protein q8a1p1; PDBTitle: x-ray crystal structure of protein q8a1p1 from bacteroides2 thetaiotaomicron. northeast structural genomics consortium3 target btr25.
67	c3en9B_	Alignment	not modelled	59.5	18	PDB header: hydrolase Chain: B: PDB Molecule: o-sialoglycoprotein endopeptidase/protein kinase; PDBTitle: structure of the methanococcus jannaschii kae1-bud32 fusion2 protein
68	c2d4wA_	Alignment	not modelled	59.1	18	PDB header: transferase Chain: A: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of glycerol kinase from cellulomonas sp.2 nt3060
69	c2dpnB_	Alignment	not modelled	58.7	14	PDB header: transferase Chain: B: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of the glycerol kinase from thermus2 thermophilus hb8
70	c3flcX_	Alignment	not modelled	55.7	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
71	c1hpmA_	Alignment	not modelled	54.8	29	PDB header: hydrolase (acting on acid anhydrides) Chain: A: PDB Molecule: 44k atpase fragment (n-terminal) of 70 kd heat-chaperone hsc70. ii. potassium binds specifically in the3 atpase active site
72	c2nlxA_	Alignment	not modelled	53.8	14	PDB header: transferase Chain: A: PDB Molecule: xylulose kinase; PDBTitle: crystal structure of the apo e. coli xylulose kinase
73	c2cgkB_	Alignment	not modelled	53.5	17	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.
74	c1xupO_	Alignment	not modelled	52.8	16	PDB header: transferase Chain: O: PDB Molecule: glycerol kinase; PDBTitle: enterococcus casseliflavus glycerol kinase complexed with glycerol
75	c2v7zA_	Alignment	not modelled	52.7	29	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
76	c3g25B_	Alignment	not modelled	52.5	20	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.
77	c3ezwD_	Alignment	not modelled	51.0	13	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
78	c1glbG_	Alignment	not modelled	51.0	13	PDB header: phosphotransferase Chain: G: PDB Molecule: glycerol kinase; PDBTitle: structure of the regulatory complex of escherichia coli iii glc with2 glycerol kinase

79	d1q18a1		Alignment	not modelled	50.2	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glucokinase
80	c3c6aA_		Alignment	not modelled	47.8	12	PDB header: viral protein Chain: A: PDB Molecule: terminase large subunit; PDBTitle: crystal structure of the rb49 gp17 nuclease domain
81	c2x3mA_		Alignment	not modelled	47.5	25	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein orf239; PDBTitle: crystal structure of hypothetical protein orf239 from pyrobaculum2 spherical virus
82	c1dkgD_		Alignment	not modelled	47.0	22	PDB header: complex (hsp24/hsp70) Chain: D: PDB Molecule: molecular chaperone dnak; PDBTitle: crystal structure of the nucleotide exchange factor grpe2 bound to the atpase domain of the molecular chaperone dnak
83	c1jcgA_		Alignment	not modelled	46.6	28	PDB header: structural protein Chain: A: PDB Molecule: rod shape-determining protein mreb; PDBTitle: mreb from thermotoga maritima, amppnp
84	c2khoA_		Alignment	not modelled	46.2	25	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
85	c3h1qB_		Alignment	not modelled	46.1	13	PDB header: structural protein Chain: B: PDB Molecule: ethanolamine utilization protein eutj; PDBTitle: crystal structure of ethanolamine utilization protein eutj from2 carboxydotothermus hydrogenoformans
86	d2p3ra1		Alignment	not modelled	45.9	12	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glycerol kinase
87	d1g99a1		Alignment	not modelled	45.1	31	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Acetokinase-like
88	c1mwmA_		Alignment	not modelled	44.5	14	PDB header: structural protein Chain: A: PDB Molecule: parm; PDBTitle: parm from plasmid r1 adp form
89	d1u6za2		Alignment	not modelled	42.4	20	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Ppx/GppA phosphatase
90	c2hoeA_		Alignment	not modelled	41.4	15	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
91	c3jvpA_		Alignment	not modelled	40.6	15	PDB header: transferase Chain: A: PDB Molecule: ribulokinase; PDBTitle: crystal structure of ribulokinase from bacillus halodurans
92	d1ig8a1		Alignment	not modelled	39.3	12	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
93	d1bdga1		Alignment	not modelled	39.1	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
94	c3n4pA_		Alignment	not modelled	38.7	15	PDB header: dna binding protein Chain: A: PDB Molecule: terminase subunit ul89 protein; PDBTitle: human cytomegalovirus terminase nuclease domain
95	d1t6ca1		Alignment	not modelled	34.9	14	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Ppx/GppA phosphatase
96	c2fsnB_		Alignment	not modelled	33.9	27	PDB header: structural protein Chain: B: PDB Molecule: hypothetical protein ta0583; PDBTitle: crystal structure of ta0583, an archaeal actin homolog, complex with2 adp
97	d1zbsa2		Alignment	not modelled	33.3	23	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Badf/BadG/BcrA/BcrD-like
98	d1r59o1		Alignment	not modelled	32.5	17	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glycerol kinase
99	c3khyA_		Alignment	not modelled	31.7	13	PDB header: transferase Chain: A: PDB Molecule: propionate kinase; PDBTitle: crystal structure of a propionate kinase from francisella2 tularensis subsp. tularensis schu s4
100	d1sz2a1		Alignment	not modelled	31.2	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glucokinase
101	d2ewsa1		Alignment	not modelled	29.4	24	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Fumble-like
102	c1t6dB_		Alignment	not modelled	28.6	17	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
103	c3n4qA_		Alignment	not modelled	28.6	15	PDB header: dna binding protein Chain: A: PDB Molecule: terminase subunit ul89 protein; PDBTitle: human cytomegalovirus terminase nuclease domain, mn soaked
104	c1bdgA_		Alignment	not modelled	28.2	11	PDB header: hexokinase Chain: A: PDB Molecule: hexokinase; PDBTitle: hexokinase from schistosoma mansoni complexed with glucose
105	c2d0oA_		Alignment	not modelled	27.1	14	PDB header: chaperone Chain: A: PDB Molecule: diol dehydratase-reactivating factor large PDBTitle: strcuture of diol dehydratase-reactivating factor

						complexed2 with adp and mg2+
106	c1tuuA	Alignment	not modelled	25.9	31	PDB header: transferase Chain: A: PDB Molecule: acetate kinase; PDBTitle: acetate kinase crystallized with atpgs
107	d1jcea1	Alignment	not modelled	25.8	36	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
108	c1saza	Alignment	not modelled	25.0	16	PDB header: transferase Chain: A: PDB Molecule: probable butyrate kinase 2; PDBTitle: membership in the askha superfamily: enzymological properties and crystal structure of butyrate kinase 2 from thermotoga maritima
109	c2iirJ	Alignment	not modelled	24.4	36	PDB header: transferase Chain: J: PDB Molecule: acetate kinase; PDBTitle: acetate kinase from a hyperthermophile thermotoga maritima
110	c3bf1C	Alignment	not modelled	24.2	19	PDB header: transferase Chain: C: PDB Molecule: type iii pantothenate kinase; PDBTitle: type iii pantothenate kinase from thermotoga maritima2 complexed with pantothenate and adp
111	c2ychA	Alignment	not modelled	23.9	11	PDB header: cell cycle Chain: A: PDB Molecule: competence protein pilM; PDBTitle: pilM-pilN type iv pilus biogenesis complex