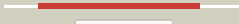



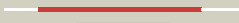



















Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	O75414
Date	Thu Apr 26 09:55:37 BST 2012
Unique Job ID	743a4569066d4224

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ztqC_	 Alignment		100.0	39	PDB header: transferase Chain: C: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: hexagonal crystal form p61 of the aquifex aeolicus nucleoside2 diphosphate kinase
2	d1s57a_	 Alignment		100.0	25	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
3	d1u8wa_	 Alignment		100.0	31	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
4	c3mpdA_	 Alignment		100.0	28	PDB header: transferase Chain: A: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: crystal structure of nucleoside diphosphate kinase from2 encephalitozoon cuniculi, cubic form, apo
5	c3ngtj_	 Alignment		100.0	31	PDB header: transferase Chain: J: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: structure of leishmania ndkb complexed with amp.
6	c2hurF_	 Alignment		100.0	39	PDB header: signaling protein,transferase Chain: F: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: escherichia coli nucleoside diphosphate kinase
7	d1xiqa_	 Alignment		100.0	26	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
8	c4dutA_	 Alignment		100.0	39	PDB header: transferase Chain: A: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: the structure of nucleoside diphosphate kinase (ndk) from burkholderia2 thailandensis
9	d1pkua1	 Alignment		100.0	30	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
10	c3q89H_	 Alignment		100.0	35	PDB header: transferase Chain: H: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: crystal structure of staphylococcus aureus nucleoside diphosphate2 kinase complexed with cdp
11	d1nhkl_	 Alignment		100.0	32	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK

12	d1w7wa_	Alignment		100.0	30	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
13	d1nb2a_	Alignment		100.0	31	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
14	c1w7wF_	Alignment		100.0	30	PDB header: transferase Chain: F: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: structure and mutational analysis of a plant mitochondrial2 nucleoside diphosphate kinase: identification of residues3 involved in serine phosphorylation and oligomerization.
15	d3bbba1	Alignment		100.0	31	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
16	d1ucna_	Alignment		100.0	26	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
17	c3js9A_	Alignment		100.0	26	PDB header: transferase Chain: A: PDB Molecule: nucleoside diphosphate kinase family protein; PDBTitle: crystal structure of nucleoside diphosphate kinase family protein from2 babesia bovis
18	d1ehwa_	Alignment		100.0	33	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
19	d1be4a_	Alignment		100.0	28	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
20	d1k44a_	Alignment		100.0	40	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
21	d2az3a1	Alignment	not modelled	100.0	33	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
22	c4di6F_	Alignment	not modelled	100.0	25	PDB header: transferase Chain: F: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: crystal structure of nucleoside-diphosphate kinase from borrelia2 burgdorferi
23	d1hlwa_	Alignment	not modelled	100.0	36	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
24	d1xqia1	Alignment	not modelled	100.0	36	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
25	c2vu5A_	Alignment	not modelled	100.0	32	PDB header: transferase Chain: A: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: crystal structure of pndk from bacillus anthracis
26	d1wkja1	Alignment	not modelled	100.0	33	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
27	d1zs6a1	Alignment	not modelled	100.0	34	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
28	d2dyaa1	Alignment	not modelled	100.0	33	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
29	d1nsqa_	Alignment	not modelled	100.0	28	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK

						Family: Nucleoside diphosphate kinase, NDK
30	c2az1B	Alignment	not modelled	100.0	31	PDB header: transferase Chain: B: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: structure of a halophilic nucleoside diphosphate kinase2 from halobacterium salinarum
31	d2b8qa1	Alignment	not modelled	100.0	35	Fold: Ferredoxin-like Superfamily: Nucleoside diphosphate kinase, NDK Family: Nucleoside diphosphate kinase, NDK
32	c3b6bF	Alignment	not modelled	100.0	36	PDB header: transferase Chain: F: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: crystal structure of acanthamoeba polyphaga mimivirus2 nucleoside diphosphate kinase complexed with dgdp
33	c3b54A	Alignment	not modelled	100.0	31	PDB header: transferase Chain: A: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: saccharomyces cerevisiae nucleoside diphosphate kinase
34	c3r9lA	Alignment	not modelled	100.0	35	PDB header: transferase Chain: A: PDB Molecule: nucleoside diphosphate kinase; PDBTitle: crystal structure of nucleoside diphosphate kinase from giardia2 lamblia featuring a disordered dinucleotide binding site
35	c2bx6A	Alignment	not modelled	97.9	21	PDB header: transduction protein Chain: A: PDB Molecule: xrp2 protein; PDBTitle: crystal structure of the human retinitis pigmentosa2 protein 2 (rp2)
36	d1wdcc	Alignment	not modelled	33.4	28	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
37	d2g7oa1	Alignment	not modelled	31.2	28	Fold: TraM-like Superfamily: TraM-like Family: TraM-like
38	d1mn3a	Alignment	not modelled	26.5	14	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
39	c3p04A	Alignment	not modelled	25.5	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
40	d1wgla	Alignment	not modelled	22.4	10	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
41	d2fi0a1	Alignment	not modelled	21.5	4	Fold: SP0561-like Superfamily: SP0561-like Family: SP0561-like
42	c3bqsB	Alignment	not modelled	21.4	8	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of an uncharacterized protein from2 listeria monocytogenes, trigonal form
43	d1br1b	Alignment	not modelled	20.8	27	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
44	d1p3qq	Alignment	not modelled	20.1	14	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
45	d1d02a	Alignment	not modelled	14.2	25	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease MunI
46	d1zl0a2	Alignment	not modelled	13.6	24	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: LD-carboxypeptidase A N-terminal domain-like
47	c2qgqF	Alignment	not modelled	12.6	14	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: protein tm_1862; PDBTitle: crystal structure of tm_1862 from thermotoga maritima.2 northeast structural genomics consortium target vr77
48	c2w0yB	Alignment	not modelled	12.4	8	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
49	c3bm3A	Alignment	not modelled	11.5	25	PDB header: hydrolase/dna Chain: A: PDB Molecule: pspgi restriction endonuclease; PDBTitle: restriction endonuclease pspgi-substrate dna complex
50	c3zvrA	Alignment	not modelled	11.2	26	PDB header: hydrolase Chain: A: PDB Molecule: dynamin-1; PDBTitle: crystal structure of dynamin
51	d1kvka2	Alignment	not modelled	10.5	21	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate kinase
52	d2pzza1	Alignment	not modelled	10.0	12	Fold: RL5-like Superfamily: RL5-like Family: SSO1042-like
53	d1u84a	Alignment	not modelled	9.0	6	Fold: YugE-like Superfamily: YugE-like Family: YugE-like
54	d2auna2	Alignment	not modelled	8.9	28	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: LD-carboxypeptidase A N-terminal domain-like
55	c3odnA	Alignment	not modelled	8.7	10	PDB header: membrane protein Chain: A: PDB Molecule: dally-like protein; PDBTitle: the crystal structure of drosophila dally-like protein core domain
56	c1y7pB	Alignment	not modelled	8.2	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein af1403; PDBTitle: 1.9 a crystal structure of a protein of unknown function2

						af1403 from archaeoglobus fulgidus, probable metabolic3 regulator
57	c3ghfA	Alignment	not modelled	8.1	17	PDB header: cell cycle Chain: A: PDB Molecule: septum site-determining protein minc; PDBTitle: crystal structure of the septum site-determining protein2 minc from salmonella typhimurium
58	c2ekwC	Alignment	not modelled	8.0	23	PDB header: contractile protein Chain: C: PDB Molecule: myosin catalytic light chain lc-1, mantle muscle; PDBTitle: the crystal structure of squid myosin s1 in the presence of2 so4 2-
59	d2g3aa1	Alignment	not modelled	7.8	12	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
60	c2x98A	Alignment	not modelled	7.5	7	PDB header: hydrolase Chain: A: PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
61	c2dhyA	Alignment	not modelled	7.4	16	PDB header: immune system Chain: A: PDB Molecule: cue domain-containing protein 1; PDBTitle: solution structure of the cue domain in the human cue2 domain containing protein 1 (cuedc1)
62	c2blcA	Alignment	not modelled	7.2	24	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrofolate reductase-thymidylate synthase; PDBTitle: sp21 double mutant p. vivax dihydrofolate reductase in2 complex with des-chloropyrimethamine
63	c3c9gB	Alignment	not modelled	7.0	24	PDB header: nucleotide binding protein Chain: B: PDB Molecule: upf0200/upf0201 protein af_1395; PDBTitle: crystal structure of uncharacterized upf0201 protein af_135
64	c1zrsB	Alignment	not modelled	7.0	29	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical protein; PDBTitle: wild-type ld-carboxypeptidase
65	d1vq3a	Alignment	not modelled	7.0	12	Fold: PurS-like Superfamily: PurS-like Family: PurS subunit of FGAM synthetase
66	d2f06a1	Alignment	not modelled	6.9	10	Fold: Ferredoxin-like Superfamily: ACT-like Family: BT0572-like
67	c3e2dB	Alignment	not modelled	6.7	10	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: the 1.4 a crystal structure of the large and cold-active2 vibrio sp. alkaline phosphatase
68	c3snhA	Alignment	not modelled	6.7	26	PDB header: endocytosis Chain: A: PDB Molecule: dynamin-1; PDBTitle: crystal structure of nucleotide-free human dynamin1
69	d1z4ra1	Alignment	not modelled	6.5	4	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
70	d2atra1	Alignment	not modelled	6.5	16	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
71	c3ebhA	Alignment	not modelled	6.3	18	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: m1 family aminopeptidase; PDBTitle: structure of the m1 alanylaminopeptidase from malaria complexed with2 bestatin
72	c2oyyF	Alignment	not modelled	6.2	24	PDB header: unknown function Chain: F: PDB Molecule: hexameric cytochrome; PDBTitle: htp: a hexameric tyrosine-coordinated heme protein
73	c3dg8B	Alignment	not modelled	6.2	19	PDB header: oxidoreductase, transferase Chain: B: PDB Molecule: bifunctional dihydrofolate reductase-thymidylate PDBTitle: quadruple mutant (n51i+c59r+s108n+i164l) plasmodium2 falciparum dihydrofolate reductase-thymidylate synthase3 (pfdhfr-ts) complexed with rjf670, nadph, and dump
74	d1dzfa1	Alignment	not modelled	5.8	18	Fold: Restriction endonuclease-like Superfamily: Eukaryotic RPB5 N-terminal domain Family: Eukaryotic RPB5 N-terminal domain
75	d1ul7a	Alignment	not modelled	5.7	24	Fold: TBP-like Superfamily: KA1-like Family: Kinase associated domain 1, KA1
76	d1qtda	Alignment	not modelled	5.5	3	Fold: PurS-like Superfamily: PurS-like Family: PurS subunit of FGAM synthetase
77	c3e0kA	Alignment	not modelled	5.5	10	PDB header: transferase Chain: A: PDB Molecule: amino-acid acetyltransferase; PDBTitle: crystal structure of c-terminal domain of n-acetylglutamate synthase2 from vibrio parahaemolyticus
78	d1n0yb	Alignment	not modelled	5.5	23	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
79	d1p3qr	Alignment	not modelled	5.4	27	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
80	d1j3ka	Alignment	not modelled	5.3	19	Fold: Dihydrofolate reductase-like Superfamily: Dihydrofolate reductase-like Family: Dihydrofolate reductases
81	d2o0qa1	Alignment	not modelled	5.3	16	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: CC0527-like
82	c3d7aB	Alignment	not modelled	5.3	6	PDB header: unknown function Chain: B: PDB Molecule: upf0201 protein ph1010;

82	c3u7ab	Alignment	not modelled	5.3	0	PDBTitle: crystal structure of duf54 family protein ph1010 from2 hyperthermophilic archaea pyrococcus horikoshii ot3
83	c3bacA	Alignment	not modelled	5.3	14	PDB header: ligase Chain: A: PDB Molecule: dna ligase; PDBTitle: structural basis for the inhibition of bacterial nad+2 dependent dna ligase
84	d2nrqa1	Alignment	not modelled	5.2	19	Fold: RL5-like Superfamily: RL5-like Family: SSO1042-like