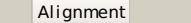
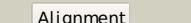
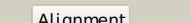
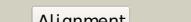
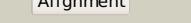
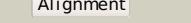
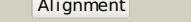
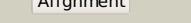
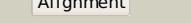
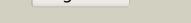


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P76502
Date	Thu Jan 5 12:23:39 GMT 2012
Unique Job ID	f55ae73e4baa3d17

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1ujcA_	Alignment		100.0	100	PDB header: hydrolase Chain: A; PDB Molecule: phosphohistidine phosphatase sixa; PDBTitle: structure of the protein histidine phosphatase sixa2 complexed with tungstate
2	c3f2iD_	Alignment		100.0	24	PDB header: structural genomics, unknown function Chain: D; PDB Molecule: alr0221 protein; PDBTitle: crystal structure of the alr0221 protein from nostoc, northeast2 structural genomics consortium target nsr422.
3	c2rf1B_	Alignment		100.0	21	PDB header: hydrolase, isomerase Chain: B; PDB Molecule: putative phosphohistidine phosphatase sixa; PDBTitle: crystal structure of the putative phosphohistidine phosphatase sixa2 from agrobacterium tumefaciens
4	c3mxoB_	Alignment		100.0	16	PDB header: hydrolase Chain: B; PDB Molecule: serine/threonine-protein phosphatase pgam5, mitochondrial; PDBTitle: crystal structure oh human phosphoglycerate mutase family member 52 (pgam5)
5	d1e58a_	Alignment		100.0	19	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
6	c1yjxD_	Alignment		100.0	23	PDB header: isomerase, hydrolase Chain: D; PDB Molecule: phosphoglycerate mutase 1; PDBTitle: crystal structure of human b type phosphoglycerate mutase
7	d1ria_	Alignment		100.0	20	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
8	d1qhfa_	Alignment		100.0	21	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
9	c2a6pA_	Alignment		100.0	16	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: possible phosphoglycerate mutase gpm2; PDBTitle: structure solution to 2.2 angstrom and functional characterisation of2 the open reading frame rv3214 from mycobacterium tuberculosis
10	c3eznB_	Alignment		100.0	24	PDB header: isomerase Chain: B; PDB Molecule: 2,3-bisphosphoglycerate-dependent phosphoglycerate mutase; PDBTitle: crystal structure of phosphoglyceromutase from burkholderia2 pseudomallei 1710b
11	d2hhja1	Alignment		100.0	21	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase

12	c3d8hB			100.0	21	PDB header: isomerase Chain: B; PDB Molecule: glycolytic phosphoglycerate mutase; PDBTitle: crystal structure of phosphoglycerate mutase from cryptosporidium2 parvum, cgd7_4270
13	c3r7aA			100.0	19	PDB header: transferase Chain: A; PDB Molecule: phosphoglycerate mutase, putative; PDBTitle: crystal structure of phosphoglycerate mutase from bacillus anthracis2 str. sterne
14	d1xq9a			100.0	18	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
15	d3pgma			100.0	19	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
16	c3d4iD			100.0	24	PDB header: hydrolase Chain: D; PDB Molecule: sts-2 protein; PDBTitle: crystal structure of the 2h-phosphatase domain of sts-2
17	d1fzta			100.0	21	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
18	c3c7tB			100.0	27	PDB header: hydrolase Chain: B; PDB Molecule: ecdysteroid-phosphate phosphatase; PDBTitle: crystal structure of the ecdysone phosphate phosphatase, eppase, from2 bombix mori in complex with tungstate
19	c2ikqA			100.0	25	PDB header: signaling protein, immune system Chain: A; PDB Molecule: suppressor of t-cell receptor signaling 1; PDBTitle: crystal structure of mouse sts-1 pgm domain in complex with phosphate
20	d1tipa			100.0	20	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase, phosphatase domain
21	c3hjgB		not modelled	100.0	14	PDB header: hydrolase Chain: B; PDB Molecule: putative alpha-ribazole-5'-phosphate phosphatase PDBTitle: crystal structure of putative alpha-ribazole-5'-phosphate2 phosphatase cobc from vibrio parahaemolyticus
22	c3dcyA		not modelled	100.0	21	PDB header: apoptosis regulator Chain: A; PDB Molecule: regulator protein; PDBTitle: crystal structure a tp53-induced glycolysis and apoptosis2 regulator protein from homo sapiens.
23	c3II4B		not modelled	99.9	21	PDB header: hydrolase Chain: B; PDB Molecule: uncharacterized protein ykr043c; PDBTitle: structure of the h13a mutant of ykr043c in complex with fructose-1,6-2 bisphosphate
24	c3fjyB		not modelled	99.9	22	PDB header: hydrolase Chain: B; PDB Molecule: probable mutt1 protein; PDBTitle: crystal structure of a probable mutt1 protein from bifidobacterium2 adolescentis
25	d1v37a		not modelled	99.9	19	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
26	c3f3kA		not modelled	99.9	21	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein ykr043c; PDBTitle: the structure of uncharacterized protein ykr043c from saccharomyces2 cerevisiae.
27	c3e9eB		not modelled	99.9	19	PDB header: hydrolase Chain: B; PDB Molecule: zgc:56074; PDBTitle: structure of full-length h11a mutant form of tigar from danio rerio
28	c2qniA		not modelled	99.9	12	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein atu0299; PDBTitle: crystal structure of uncharacterized protein atu0299

29	d1h2ea		Alignment	not modelled	99.9	18	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Cofactor-dependent phosphoglycerate mutase
30	d1bifa2		Alignment	not modelled	99.9	20	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase, phosphatase domain
31	c2i1vB		Alignment	not modelled	99.9	20	PDB header: transferase, hydrolase Chain: B: PDB Molecule: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphate PDBTitle: crystal structure of pfkfb3 in complex with adp and2 fructose-2,6-bisphosphate
32	d1k6ma2		Alignment	not modelled	99.9	20	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase, phosphatase domain
33	c1k6mA		Alignment	not modelled	99.9	22	PDB header: transferase, hydrolase Chain: A: PDB Molecule: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphate PDBTitle: crystal structure of human liver 6-phosphofructo-2-2 kinase/fructose-2,6-bisphosphatase
34	c1bifA		Alignment	not modelled	99.9	23	PDB header: bifunctional enzyme Chain: A: PDB Molecule: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase; PDBTitle: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase bifunctional enzyme complexed with atp-g-s and phosphate
35	c3eoZB		Alignment	not modelled	99.9	22	PDB header: isomerase Chain: B: PDB Molecule: putative phosphoglycerate mutase; PDBTitle: crystal structure of phosphoglycerate mutase from plasmidium2 falciparum, pfd0660w
36	c2glcA		Alignment	not modelled	98.0	26	PDB header: hydrolase Chain: A: PDB Molecule: histidine acid phosphatase; PDBTitle: structure of francisella tularensis histidine acid2 phosphatase bound to orthovanadate
37	d1nd6a		Alignment	not modelled	97.9	17	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
38	d1rpaa		Alignment	not modelled	97.9	18	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
39	d1ihpa		Alignment	not modelled	97.8	19	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
40	c2wniC		Alignment	not modelled	97.7	29	PDB header: hydrolase Chain: C: PDB Molecule: 3-phytase; PDBTitle: crystal structure analysis of klebsiella sp asr1 phytase
41	d1nt4a		Alignment	not modelled	97.7	18	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
42	d1dkla		Alignment	not modelled	97.6	25	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
43	d1qwoa		Alignment	not modelled	97.4	15	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
44	d1qfxa		Alignment	not modelled	97.3	20	Fold: Phosphoglycerate mutase-like Superfamily: Phosphoglycerate mutase-like Family: Histidine acid phosphatase
45	c2gfiB		Alignment	not modelled	96.8	20	PDB header: hydrolase Chain: B: PDB Molecule: phytase; PDBTitle: crystal structure of the phytase from d. castellii at 2.3 a
46	c3nzeB		Alignment	not modelled	69.1	11	PDB header: transcription regulator Chain: B: PDB Molecule: putative transcriptional regulator, sugar-binding family; PDBTitle: the crystal structure of a domain of a possible sugar-binding2 transcriptional regulator from arthrobacter aurescens tc1.
47	c3bk7A		Alignment	not modelled	37.2	26	PDB header: hydrolyase/translation Chain: A: PDB Molecule: abc transporter atp-binding protein; PDBTitle: structure of the complete abce1/rnaase-l inhibitor protein2 from pyrococcus abyssi
48	d1b5ta		Alignment	not modelled	31.9	13	Fold: TIM beta/alpha-barrel Superfamily: FAD-linked oxidoreductase Family: Methylenetetrahydrofolate reductase
49	c2w48D		Alignment	not modelled	30.0	10	PDB header: transcription Chain: D: PDB Molecule: sorbitol operon regulator; PDBTitle: crystal structure of the full-length sorbitol operon2 regulator sorc from klebsiella pneumoniae
50	d1lbqa		Alignment	not modelled	27.2	15	Fold: Chelatase-like Superfamily: Chelatase Family: Ferrochelatase
51	d1l2ta		Alignment	not modelled	25.2	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
52	c3efhB		Alignment	not modelled	20.0	18	PDB header: transferase Chain: B: PDB Molecule: ribose-phosphate pyrophosphokinase 1; PDBTitle: crystal structure of human phosphoribosyl pyrophosphate synthetase 1
53	d2c4ka2		Alignment	not modelled	18.4	20	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosylpyrophosphate synthetase-like
54	c3ss6B		Alignment	not modelled	16.8	12	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of the bacillus anthracis acetyl-coa acetyltransferase
							Fold: P-loop containing nucleoside triphosphate hydrolases

55	d1cr2a_	Alignment	not modelled	16.3	12	Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain) PDB header: hydrolase, translation Chain: A: PDB Molecule: rnase I inhibitor; PDBTitle: crystal structure of abcE1 of sulfolobus solfataricus (-fes domain)
56	c3ozxA_	Alignment	not modelled	14.9	23	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosylpyrophosphate synthetase-like
57	d1dkua2	Alignment	not modelled	14.8	20	PDB header: hydrolase, membrane protein Chain: C: PDB Molecule: copper efflux atpase; PDBTitle: crystal structure of a copper-transporting pib-type atpase
58	c3rfuC_	Alignment	not modelled	14.5	16	PDB header: hydrolyase/translation Chain: A: PDB Molecule: rnase I inhibitor; PDBTitle: rnase-I inhibitor
59	c1yqtA_	Alignment	not modelled	14.3	24	PDB header: replication Chain: D: PDB Molecule: rad50 abc-atpase; PDBTitle: crystal structure of rad50 abc-atpase
60	c1f2uD_	Alignment	not modelled	13.9	21	PDB header: membrane protein/hydrolase Chain: C: PDB Molecule: methionine import atp-binding protein metn; PDBTitle: crystal structure of methionine importer metni
61	c3dhwC_	Alignment	not modelled	13.3	17	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
62	d1j98a_	Alignment	not modelled	12.7	16	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: DhaM-like
63	d3b48a1	Alignment	not modelled	12.7	22	PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 2; PDBTitle: structures of iron-dependent alcohol dehydrogenase 2 from zymomonas2 mobilis zm4 complexed with nad cofactor
64	c3ox4D_	Alignment	not modelled	12.7	16	Fold: THUMP domain Superfamily: THUMP domain-like Family: THUMP domain
65	d1vbka2	Alignment	not modelled	12.7	50	PDB header: sugar binding protein Chain: A: PDB Molecule: multiple sugar-binding transport atp-binding PDBTitle: crystal structure of multiple sugar binding transport atp-2 binding protein
66	c2d62A_	Alignment	not modelled	12.2	15	PDB header: oxidoreductase Chain: K: PDB Molecule: acetohydroxy acid isomerase; PDBTitle: acetohydroxy acid isomerase complexed with nadph,2 magnesium and inhibitor ipoha (n-hydroxy-n-3 isopropylxamate)
67	c1yveK_	Alignment	not modelled	12.2	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
68	d3dhwc1	Alignment	not modelled	12.0	20	PDB header: regulatory protein Chain: D: PDB Molecule: phosphoribosyl pyrophosphate synthetase- PDBTitle: crystal structure of human phosphoribosylpyrophosphate2 synthetase-associated protein 39 (pap39)
69	c2c4kD_	Alignment	not modelled	11.9	17	PDB header: oxidoreductase Chain: A: PDB Molecule: 5,10-methylenetetrahydrofolate reductase; PDBTitle: ala177val mutant of e. coli methylenetetrahydrofolate2 reductase
70	c2fmoA_	Alignment	not modelled	11.8	12	Fold: TIM beta/alpha-barrel Superfamily: FAD-linked oxidoreductase Family: Methylenetetrahydrofolate reductase
71	d1v93a_	Alignment	not modelled	11.1	14	PDB header: hydrolase Chain: C: PDB Molecule: fusion complex of cystic fibrosis transmembrane PDBTitle: crystal structure of human nbd2 complexed with n6-2 phenylethyl-atp (p-atp)
72	c3gd7C_	Alignment	not modelled	11.1	9	Fold: Dehydroquinate synthase-like Superfamily: Dehydroquinate synthase-like Family: Iron-containing alcohol dehydrogenase
73	d1vlja_	Alignment	not modelled	10.6	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
74	d1loxxk2	Alignment	not modelled	10.5	23	Fold: Dehydroquinate synthase-like Superfamily: Dehydroquinate synthase-like Family: Iron-containing alcohol dehydrogenase
75	d1rrma_	Alignment	not modelled	9.9	13	PDB header: substrate binding protein Chain: A: PDB Molecule: substrate binding periplasmic protein; PDBTitle: crystal structure of substrate-binding periplasmic protein2 (ppb) from ralstonia solanacearum
76	c3lopA_	Alignment	not modelled	9.1	12	PDB header: transport protein Chain: A: PDB Molecule: sugar-binding transport atp-binding protein; PDBTitle: crystal structure of the atp-binding cassette of multisugar2 transporter from pyrococcus horikoshii ot3 complexed with3 atp
77	c1vcia_	Alignment	not modelled	9.0	13	PDB header: transport protein Chain: D: PDB Molecule: maltose/maltodextrin transport atp-binding protein malk; PDBTitle: crystal structure of e. coli malk in the nucleotide-free form
78	c1q1bD_	Alignment	not modelled	9.0	17	PDB header: hydrolase Chain: D: PDB Molecule: uvrabc system protein a;
79	c2ygrD_	Alignment	not modelled	8.9	14	

						PDBTitle: mycobacterium tuberculosis uvra
80	d1su7a_	Alignment	not modelled	8.5	15	Fold: Prismane protein-like Superfamily: Prismane protein-like Family: Carbon monoxide dehydrogenase
81	c1dkrB_	Alignment	not modelled	8.4	21	PDB header: transferase Chain: B: PDB Molecule: phosphoribosyl pyrophosphate synthetase; PDBTitle: crystal structures of bacillus subtilis phosphoribosylpyrophosphate2 synthetase: molecular basis of allosteric inhibition and activation.
82	d2obba1	Alignment	not modelled	8.4	8	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
83	c2nq2C_	Alignment	not modelled	8.3	21	PDB header: metal transport Chain: C: PDB Molecule: hypothetical abc transporter atp-binding protein PDBTitle: an inward-facing conformation of a putative metal-chelate2 type abc transporter.
84	d1vjea_	Alignment	not modelled	8.1	30	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
85	c3bfjK_	Alignment	not modelled	8.0	9	PDB header: oxidoreductase Chain: K: PDB Molecule: 1,3-propanediol oxidoreductase; PDBTitle: crystal structure analysis of 1,3-propanediol oxidoreductase
86	c2ibyD_	Alignment	not modelled	7.9	12	PDB header: transferase Chain: D: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystallographic and kinetic studies of human mitochondrial2 acetoacetyl-coa thiolase (t2): the importance of potassium and3 chloride for its structure and function
87	c3fvqB_	Alignment	not modelled	7.7	17	PDB header: hydrolase Chain: B: PDB Molecule: fe(3+) ions import atp-binding protein fbpc; PDBTitle: crystal structure of the nucleotide binding domain fbpc2 complexed with atp
88	d1g2912	Alignment	not modelled	7.5	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
89	d3d31a2	Alignment	not modelled	7.4	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
90	c3hruA_	Alignment	not modelled	7.2	15	PDB header: transcription Chain: A: PDB Molecule: metalloregulator scar; PDBTitle: crystal structure of scar with bound zn2+
91	c1u9yD_	Alignment	not modelled	7.1	14	PDB header: transferase Chain: D: PDB Molecule: ribose-phosphate pyrophosphokinase; PDBTitle: crystal structure of phosphoribosyl diphosphate synthase2 from methanocaldococcus jannaschii
92	c3sg0A_	Alignment	not modelled	7.1	7	PDB header: signaling protein Chain: A: PDB Molecule: extracellular ligand-binding receptor; PDBTitle: the crystal structure of an extracellular ligand-binding receptor from2 rhodopseudomonas palustris haa2
93	c3lfhF_	Alignment	not modelled	7.1	29	PDB header: transferase Chain: F: PDB Molecule: phosphotransferase system, mannose/fructose-specific PDBTitle: crystal structure of manxa from thermoanaerobacter tengcongensis
94	c2it1B_	Alignment	not modelled	7.0	21	PDB header: transport protein Chain: B: PDB Molecule: 362aa long hypothetical maltose/maltodextrin PDBTitle: structure of ph0203 protein from pyrococcus horikoshii
95	d1jb7a3	Alignment	not modelled	7.0	10	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
96	d3beda1	Alignment	not modelled	7.0	18	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: EIIA-man component-like
97	d1oaoa_	Alignment	not modelled	6.5	13	Fold: Prismane protein-like Superfamily: Prismane protein-like Family: Carbon monoxide dehydrogenase
98	c3gfoA_	Alignment	not modelled	6.5	19	PDB header: atp binding protein Chain: A: PDB Molecule: cobalt import atp-binding protein cbio 1; PDBTitle: structure of cbio1 from clostridium perfringens: part of2 the abc transporter complex cbionq.
99	d2awna2	Alignment	not modelled	6.4	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like