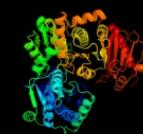
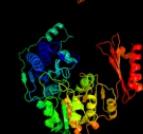
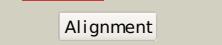
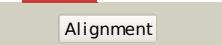
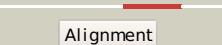
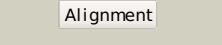
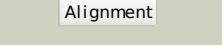
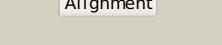
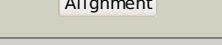
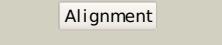
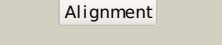


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P36938
Date	Thu Jan 5 11:54:03 GMT 2012
Unique Job ID	6f1d53f509f8b040

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2fuvB_			100.0	96	PDB header: isomerase Chain: B; PDB Molecule: phosphoglucumutase; PDBTitle: phosphoglucumutase from salmonella typhimurium.
2	c2z0fA_			100.0	54	PDB header: isomerase Chain: A; PDB Molecule: putative phosphoglucumutase; PDBTitle: crystal structure of putative phosphoglucumutase from thermus2 thermophilus hb8
3	c1kfiA_			100.0	22	PDB header: isomerase Chain: A; PDB Molecule: phosphoglucumutase 1; PDBTitle: crystal structure of the exocytosis-sensitive2 phosphoprotein, pp63/parafusin (phosphoglucumutase) from3 paramecium
4	c1c4gB_			100.0	26	PDB header: transferase Chain: B; PDB Molecule: protein (alpha-d-glucose 1-phosphate PDBTitle: phosphoglucumutase vanadate based transition state analog2 complex
5	c1wqaB_			100.0	27	PDB header: isomerase Chain: B; PDB Molecule: phospho-sugar mutase; PDBTitle: crystal structure of pyrococcus horikoshii2 phosphomannomutase/phosphoglucumutase complexed with mg2+
6	c2f7IA_			100.0	23	PDB header: isomerase Chain: A; PDB Molecule: 455aa long hypothetical phospho-sugar mutase; PDBTitle: crystal structure of sulfolobus tokodaii2 phosphomannomutase/phosphoglucumutase
7	c3c04A_			100.0	22	PDB header: isomerase Chain: A; PDB Molecule: phosphomannomutase/phosphoglucumutase; PDBTitle: structure of the p368g mutant of pmm/pgm from p. aeruginosa
8	c3pdkB_			100.0	20	PDB header: isomerase Chain: B; PDB Molecule: phosphoglcosamine mutase; PDBTitle: crystal structure of phosphoglcosamine mutase from b. anthracis
9	c1tuoA_			100.0	29	PDB header: biosynthetic protein Chain: A; PDB Molecule: putative phosphomannomutase; PDBTitle: crystal structure of putative phosphomannomutase from2 thermus thermophilus hb8
10	c3i3wB_			100.0	22	PDB header: isomerase Chain: B; PDB Molecule: phosphoglcosamine mutase; PDBTitle: structure of a phosphoglcosamine mutase from francisella tularensis
11	c2dkdA_			100.0	20	PDB header: isomerase Chain: A; PDB Molecule: phosphoacetylglucosamine mutase; PDBTitle: crystal structure of n-acetylglucosamine-phosphate mutase,2 a member of the alpha-d-phosphohexomutase superfamily, in3 the product complex

12	d1kfia1			100.0	24	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
13	d3pmga1			100.0	30	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
14	d1p5dx1			100.0	25	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
15	d3pmga3			99.9	23	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
16	d1kfia3			99.9	29	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
17	d1p5dx3			99.9	17	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
18	d1p5dx2			99.9	22	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
19	d1kfia2			99.9	17	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
20	d3pmga2			99.8	25	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
21	d1p5dx4		not modelled	99.8	20	Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain
22	d1wjwa		not modelled	99.3	21	Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain
23	d3pmga4		not modelled	98.1	17	Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain
24	d1kfia4		not modelled	97.9	17	Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain
25	c3s5pA		not modelled	84.0	17	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: crystal structure of ribose-5-phosphate isomerase b rpib from giardia2 lamblia PDB header: lyase Chain: C: PDB Molecule: endolysin; PDBTitle: catalytic domain of cd27l endolysin targeting clostridia difficile
26	c3qayC		not modelled	82.3	10	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase; PDBTitle: structural study of clostridium thermocellum ribose-5-phosphate2 isomerase b
27	c3he8A		not modelled	80.1	25	PDB header: isomerase Chain: A: PDB Molecule: ribose/Galactose isomerase RpiB/AlsB PDBTitle: structural study of clostridium thermocellum ribose-5-phosphate2 isomerase b
28	d1nn4a		not modelled	80.0	22	Fold: Ribose/Galactose isomerase RpiB/AlsB Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
						Fold: Ribose/Galactose isomerase RpiB/AlsB

29	d2vvpA1	Alignment	not modelled	79.7	28	Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
30	c2ppwA_	Alignment	not modelled	78.8	13	PDB header: isomerase Chain: A: PDB Molecule: conserved domain protein; PDBTitle: the crystal structure of uncharacterized ribose 5-phosphate isomerase2 rpib from streptococcus pneumoniae
31	c3c5yD_	Alignment	not modelled	76.0	16	PDB header: isomerase Chain: D: PDB Molecule: ribose/galactose isomerase; PDBTitle: crystal structure of a putative ribose 5-phosphate isomerase2 (sarco_3514) from novosphingobium aromaticivorans dsm at 1.81 a3 resolution
32	d3bulA2	Alignment	not modelled	73.9	19	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
33	c3ne8A_	Alignment	not modelled	73.6	25	PDB header: hydrolase Chain: A: PDB Molecule: n-acetyl muramoyl-l-alanine amidase; PDBTitle: the crystal structure of a domain from n-acetyl muramoyl-l-alanine2 amidase of bartonella henselae str. houston-1
34	c3k7pA_	Alignment	not modelled	70.0	12	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: structure of mutant of ribose 5-phosphate isomerase type b from trypanosoma cruzi.
35	c3m1pA_	Alignment	not modelled	70.0	12	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: structure of ribose 5-phosphate isomerase type b from trypanosoma cruzi, soaked with allose-6-phosphate
36	c1k98A_	Alignment	not modelled	65.6	19	PDB header: transferase Chain: A: PDB Molecule: methionine synthase; PDBTitle: adomet complex of meth c-terminal fragment
37	d1o1xa_	Alignment	not modelled	59.5	18	Fold: Ribose/Galactose isomerase RpiB/AlsB Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
38	c3k6qB_	Alignment	not modelled	53.1	9	PDB header: ligand binding protein Chain: B: PDB Molecule: putative ligand binding protein; PDBTitle: crystal structure of an antitoxin part of a putative toxin/antitoxin2 system (swol_0700) from syntrophomonas wolfei subsp. wolfei at 1.80 a3 resolution
39	d1e5da1	Alignment	not modelled	49.0	14	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
40	d2bl5a1	Alignment	not modelled	44.9	24	Fold: Eukaryotic type KH-domain (KH-domain type I) Superfamily: Eukaryotic type KH-domain (KH-domain type I) Family: Eukaryotic type KH-domain (KH-domain type I)
41	c3onoA_	Alignment	not modelled	44.3	10	PDB header: isomerase Chain: A: PDB Molecule: ribose/galactose isomerase; PDBTitle: crystal structure of ribose-5-phosphate isomerase lacab_rpib from2 vibrio parahaemolyticus
42	c2q9uB_	Alignment	not modelled	44.2	10	PDB header: oxidoreductase Chain: B: PDB Molecule: a-type flavoprotein; PDBTitle: crystal structure of the flavodiiron protein from giardia2 intestinalis
43	d1x74a1	Alignment	not modelled	42.1	10	Fold: CoA-transferase family III (CaiB/BaiF) Superfamily: CoA-transferase family III (CaiB/BaiF) Family: CoA-transferase family III (CaiB/BaiF)
44	d1ccwa_	Alignment	not modelled	42.0	16	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
45	c3op1A_	Alignment	not modelled	41.6	15	PDB header: transferase Chain: A: PDB Molecule: macrolide-efflux protein; PDBTitle: crystal structure of macrolide-efflux protein sp_1110 from2 streptococcus pneumoniae
46	c2zkiH_	Alignment	not modelled	41.2	12	PDB header: transcription Chain: H: PDB Molecule: 199aa long hypothetical trp repressor binding PDBTitle: crystal structure of hypothetical trp repressor binding2 protein from sul folobus tokodaii (st0872)
47	d1gvfa_	Alignment	not modelled	40.8	14	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
48	c3nvtA_	Alignment	not modelled	40.4	14	PDB header: transferase/isomerase Chain: A: PDB Molecule: 3-deoxy-d-arabino-heptulosonate 7-phosphate synthase; PDBTitle: 1.95 angstrom crystal structure of a bifunctional 3-deoxy-7-2 phosphoheptulonate synthase/chorismate mutase (aroA) from listeria3 monocytogenes egd-e
49	c2i2xD_	Alignment	not modelled	38.1	19	PDB header: transferase Chain: D: PDB Molecule: methyltransferase 1; PDBTitle: crystal structure of methanol:cobalamin methyltransferase complex2 mtabc from methanoscincus barkeri
50	c3a9rA_	Alignment	not modelled	37.0	21	PDB header: isomerase Chain: A: PDB Molecule: d-arabinose isomerase; PDBTitle: x-ray structures of bacillus pallidus d-arabinose2 isomerasercomplex with (4r)-2-methylpentane-2,4-diol
51	c3pm6B_	Alignment	not modelled	36.9	19	PDB header: lyase Chain: B: PDB Molecule: putative fructose-bisphosphate aldolase; PDBTitle: crystal structure of putative fructose-1,6-biphosphate aldolase from2 coccidioides immitis solved by combined sad mr
52	d1yt8a4	Alignment	not modelled	34.6	8	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
53	c1bmtB_	Alignment	not modelled	33.9	18	PDB header: methyltransferase Chain: B: PDB Molecule: methionine synthase; PDBTitle: how a protein binds b12: a 3.0 angstrom x-ray structure of2 the b12-binding domains of methionine synthase
54	c2ql5A_	Alignment	not modelled	33.6	15	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-7;

					PDBTitle: crystal structure of caspase-7 with inhibitor ac-dmqd-cho
55	d1t6t1	Alignment	not modelled	33.5	Fold: Toprim domain Superfamily: Toprim domain Family: Toprim domain
56	c3qd5B	Alignment	not modelled	33.1	PDB header: isomerase Chain: B: PDB Molecule: putative ribose-5-phosphate isomerase; PDBTitle: crystal structure of a putative ribose-5-phosphate isomerase from <i>coccidioides immitis</i> solved by combined iodide ion sad and mr
57	c1y80A	Alignment	not modelled	32.6	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted cobalamin binding protein; PDBTitle: structure of a corrinoid (factor iim)-binding protein from <i>moorella thermoacetica</i>
58	c2plqA	Alignment	not modelled	32.2	PDB header: hydrolase Chain: A: PDB Molecule: aliphatic amidase; PDBTitle: crystal structure of the amidase from <i>geobacillus pallidus</i> rapc8
59	c2iswB	Alignment	not modelled	32.2	PDB header: lyase Chain: B: PDB Molecule: putative fructose-1,6-bisphosphate aldolase; PDBTitle: structure of giardia fructose-1,6-bisphosphate aldolase in2 complex with phosphoglycolohydroxamate
60	d1b0aa2	Alignment	not modelled	30.7	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Tetrahydrofolate dehydrogenase/cyclohydrolase
61	d1ykga1	Alignment	not modelled	30.0	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Cytochrome p450 reductase N-terminal domain-like
62	d3eeqa2	Alignment	not modelled	29.8	Fold: CbiG N-terminal domain-like Superfamily: CbiG N-terminal domain-like Family: CbiG N-terminal domain-like
63	c1pyoA	Alignment	not modelled	29.8	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-2; PDBTitle: crystal structure of human caspase-2 in complex with acetyl-leu-asn-2 glu-ser-asn-cho
64	d1jwqa	Alignment	not modelled	27.9	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: N-acetyl muramoyl-L-alanine amidase-like
65	d1a4ia2	Alignment	not modelled	26.9	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Tetrahydrofolate dehydrogenase/cyclohydrolase
66	d7rega2	Alignment	not modelled	26.8	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
67	d1vmea1	Alignment	not modelled	25.6	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
68	c3qqzA	Alignment	not modelled	25.4	PDB header: metal binding protein Chain: A: PDB Molecule: putative uncharacterized protein yjik; PDBTitle: crystal structure of the c-terminal domain of the yjik protein from <i>escherichia coli</i> cft073
69	c1pyaD	Alignment	not modelled	25.2	PDB header: carboxy-lyase Chain: D: PDB Molecule: pyruvoyl-dependent histidine decarboxylase (I-) PDBTitle: refined structure of the pyruvoyl-dependent histidine2 decarboxylase from <i>lactobacillus 30a</i>
70	c3hlyA	Alignment	not modelled	25.0	PDB header: flavoprotein Chain: A: PDB Molecule: flavodoxin-like domain; PDBTitle: crystal structure of the flavodoxin-like domain from <i>synchococcus sp q5mpz6_sypn6</i> protein. northeast structural genomics consortium target snr135d.
71	c3sz8D	Alignment	not modelled	24.1	PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 2; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from <i>burkholderia pseudomallei</i>
72	c1i51A	Alignment	not modelled	23.5	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-7 subunit p20; PDBTitle: crystal structure of caspase-7 complexed with xiap
73	d1jf8a	Alignment	not modelled	23.5	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: Phosphotyrosine protein phosphatases I Family: Low-molecular-weight phosphotyrosine protein phosphatases
74	c3f93D	Alignment	not modelled	23.1	PDB header: hydrolase Chain: D: PDB Molecule: beta-glucosidase; PDBTitle: crystal structure of exo-1,3/1,4-beta-glucanase (exop) from <i>pseudoalteromonas sp. bb1</i>
75	d2nmla1	Alignment	not modelled	22.8	Fold: ERH-like Superfamily: ERH-like Family: ERH-like
76	c2nn3D	Alignment	not modelled	22.3	PDB header: hydrolase Chain: D: PDB Molecule: caspase-1; PDBTitle: structure of pro-sf-caspase-1
77	d1rvga	Alignment	not modelled	22.2	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
78	c3tqkA	Alignment	not modelled	22.1	PDB header: transferase Chain: A: PDB Molecule: phospho-2-dehydro-3-deoxyheptonate aldolase; PDBTitle: structure of phospho-2-dehydro-3-deoxyheptonate aldolase from <i>francisella tularensis</i> schu s4
79	d2aeea1	Alignment	not modelled	21.5	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)

					PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase, catabolic; PDBTitle: crystal structure of the hexameric catabolic ornithine2 transcarbamylase from <i>lactobacillus hilgardii</i>
80	c2w37A	Alignment	not modelled	21.0	18 Fold: Caspase-like Superfamily: Caspase-like Family: Caspase catalytic domain
81	d1m72a	Alignment	not modelled	20.6	17 PDB header: transferase Chain: A: PDB Molecule: glutamine cyclotransferase; PDBTitle: crystal structure of <i>zymomonas mobilis</i> glutaminyl cyclase (trigonal2 form)
82	c3nolA	Alignment	not modelled	20.5	18 PDB header: lyase Chain: B: PDB Molecule: fructose-bisphosphate aldolase, class ii; PDBTitle: the crystal structure of fructose 1,6-bisphosphate aldolase from <i>2 bacillus anthracis</i> str. 'ames ancestor'
83	c3q94B	Alignment	not modelled	19.9	20 Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
84	d1dxha2	Alignment	not modelled	19.7	19 PDB header: transferase Chain: C: PDB Molecule: dephospho-coa kinase; PDBTitle: crystal structure of the putative dephospho-coa kinase from <i>aquifex2 aeolicus</i> , northeast structural genomics target qr72.
85	c2if2C	Alignment	not modelled	19.0	11 PDB header: lyase Chain: A: PDB Molecule: uroporphyrinogen-iii synthase; PDBTitle: crystal structure of an uroporphyrinogen-iii synthase (<i>sama_3255</i>) from <i>shewanella amazonensis</i> sb2b at 1.65 a resolution
86	c3mw8A	Alignment	not modelled	19.0	9 Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
87	d1ycga1	Alignment	not modelled	18.9	17 PDB header: hydrolase/hydrolase inhibitor Chain: I: PDB Molecule: caspase-8 alpha-chain; PDBTitle: crystal structure of the complex of caspase-8 with the tripeptide2 ketone inhibitor zevd-dcbmk
88	c1qdu1	Alignment	not modelled	18.7	5 PDB header: transferase Chain: B: PDB Molecule: orotate phosphoribosyltransferase; PDBTitle: human orotate phosphoribosyltransferase (oprtase) domain of 2 uridine 5'-monophosphate synthase (umps) in complex with 3 its substrate orotidine 5'-monophosphate (omp)
89	c2wnsB	Alignment	not modelled	18.5	16 Fold: Tubulin nucleotide-binding domain-like Superfamily: Tubulin nucleotide-binding domain-like Family: Tubulin, GTPase domain
90	d1tubb1	Alignment	not modelled	18.4	16 Fold: Eukaryotic type KH-domain (KH-domain type I) Superfamily: Eukaryotic type KH-domain (KH-domain type I) Family: Eukaryotic type KH-domain (KH-domain type I)
91	d1k1ga	Alignment	not modelled	18.4	30 PDB header: transferase Chain: A: PDB Molecule: dna primase; PDBTitle: crystal structure of the <i>aquifex aeolicus</i> primase (zinc binding and 2 rna polymerase domains)
92	c2au3A	Alignment	not modelled	18.3	17 PDB header: transcarbamylase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: ornithine carbamoyltransferase from <i>pyrococcus furiosus</i>
93	c1alsA	Alignment	not modelled	18.3	19 PDB header: ligand binding protein Chain: B: PDB Molecule: glycine betaine-binding protein; PDBTitle: the compatible solute-binding protein opvac from <i>bacillus2 subtilis</i> in complex with dmsa
94	c3chgB	Alignment	not modelled	17.7	16 PDB header: hydrolase/hydrolase inhibitor Chain: C: PDB Molecule: caspase-3; PDBTitle: crystal structure of caspase-3 with inhibitor ac-Idesd-cho
95	c3edqC	Alignment	not modelled	17.6	7 PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative kinase; PDBTitle: crystal structure of putative kinase from <i>clostridium symbiosum</i> atcc2 14940
96	c3hdTB	Alignment	not modelled	17.2	16 PDB header: lyase Chain: B: PDB Molecule: fructose-bisphosphate aldolase; PDBTitle: class ii fructose-1,6-bisphosphate aldolase from <i>helicobacter pylori</i> in complex with 3 phosphoglycolohydroxamic acid, a competitive inhibitor
97	c3c52B	Alignment	not modelled	16.9	30 PDB header: transferase Chain: D: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase from <i>mycobacterium2 tuberculosis</i> (rv1656): orthorhombic form
98	c2p2gD	Alignment	not modelled	16.2	22 PDB header: transferase Chain: A: PDB Molecule: pts system, galactitol-specific iib component; PDBTitle: nmr structure of enzyme gatb of the galactitol-specific2 phosphoenolpyruvate-dependent phosphotransferase system
99	c1tvma	Alignment	not modelled	16.1	13