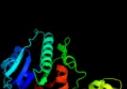
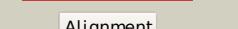
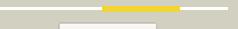
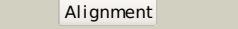
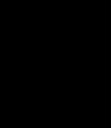
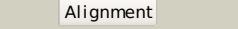
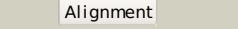
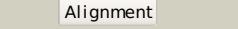
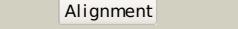
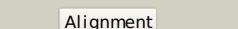
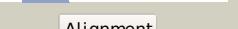
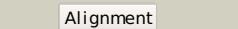
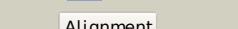


Phyre²

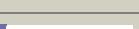
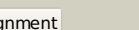
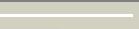
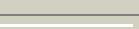
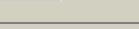
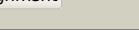
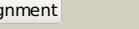
Email	i.a.kelley@imperial.ac.uk
Description	P77218
Date	Thu Jan 5 12:26:31 GMT 2012
Unique Job ID	d3717b41944f02c7

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1vma_			100.0	98	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: Phosphotransacetylase
2	c1vma_			100.0	98	PDB header: transferase Chain: A; PDB Molecule: putative phosphate acetyltransferase; PDBTitle: crystal structure of putative phosphate acetyltransferase2 (np_416953.1) from escherichia coli k12 at 2.32 a resolution
3	d1xcoa_			100.0	42	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: Phosphotransacetylase
4	d1r5ja_			100.0	41	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: Phosphotransacetylase
5	d2af4c1			100.0	35	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: Phosphotransacetylase
6	c3tnqA_			100.0	23	PDB header: transferase Chain: A; PDB Molecule: lmo1369 protein; PDBTitle: the crystal structure of a possible phosphate acetyl/butyryl2 transferase from listeria monocytogenes egd-e.
7	c1ycoA_			100.0	22	PDB header: transferase Chain: A; PDB Molecule: branched-chain phosphotransacylase; PDBTitle: crystal structure of a branched-chain phosphotransacylase from2 enterococcus faecalis v583
8	d1vila_			100.0	21	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: PIsX-like
9	d1u7na_			100.0	19	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: PIsX-like
10	d1ptma_			100.0	15	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: PdxA-like
11	c1yxoB_			99.9	14	PDB header: oxidoreductase Chain: B; PDB Molecule: 4-hydroxythreonine-4-phosphate dehydrogenase 1; PDBTitle: crystal structure of pyridoxal phosphate biosynthetic protein pdxa2 pa0593

12	d1r8ka			99.8	16	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: PdxA-like
13	c2hi1A			98.8	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 4-hydroxythreonine-4-phosphate dehydrogenase 2; PDBTitle: the structure of a putative 4-hydroxythreonine-4-phosphate2 dehydrogenase from salmonella typhimurium.
14	c3lfhF			73.3	15	PDB header: transferase Chain: F: PDB Molecule: phosphotransferase system, mannose/fructose-specific PDBTitle: crystal structure of manxa from thermoanaerobacter tengcongensis
15	c2iueA			70.3	10	PDB header: membrane protein Chain: A: PDB Molecule: pactolus i-domain; PDBTitle: pactolus i-domain: functional switching of the rossmann2 fold
16	d3b48a1			68.2	11	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: DhaM-like
17	d3beda1			65.0	12	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: EIiA-man component-like
18	c2ys6A			58.5	10	PDB header: ligase Chain: A: PDB Molecule: phosphoribosylglycinamide synthetase; PDBTitle: crystal structure of gar synthetase from geobacillus kaustophilus
19	c2yyaB			56.7	14	PDB header: ligase Chain: B: PDB Molecule: phosphoribosylamine--glycine ligase; PDBTitle: crystal structure of gar synthetase from aquifex aeolicus
20	c2qk4A			54.9	10	PDB header: ligase Chain: A: PDB Molecule: trifunctional purine biosynthetic protein adenosine-3'; PDBTitle: human glycaminamide ribonucleotide synthetase
21	c2xd4A		not modelled	51.2	7	PDB header: ligase Chain: A: PDB Molecule: phosphoribosylamine--glycine ligase; PDBTitle: nucleotide-bound structures of bacillus subtilis glycaminamide2 ribonucleotide synthetase
22	c2vy9A		not modelled	46.4	13	PDB header: gene regulation Chain: A: PDB Molecule: anti-sigma-factor antagonist; PDBTitle: molecular architecture of the stressosome, a signal2 integration and transduction hub
23	c1gsoA		not modelled	42.7	12	PDB header: ligase Chain: A: PDB Molecule: protein (glycaminamide ribonucleotide synthetase); PDBTitle: glycaminamide ribonucleotide synthetase (gar-syn) from e. coli
24	c3mtqA		not modelled	29.4	15	PDB header: transferase Chain: A: PDB Molecule: putative phosphoenolpyruvate-dependent sugar PDBTitle: crystal structure of a putative phosphoenolpyruvate-dependent sugar2 phosphotransferase system (pts) permease (kpn_04802) from klebsiella3 pneumoniae subsp. pneumoniae mgh 78578 at 1.70 a resolution
25	c2ip4A		not modelled	27.1	14	PDB header: ligase Chain: A: PDB Molecule: phosphoribosylamine--glycine ligase; PDBTitle: crystal structure of glycaminamide ribonucleotide synthetase from thermus thermophilus hb8
26	c3ip8A		not modelled	26.8	8	PDB header: ligase Chain: A: PDB Molecule: phosphoribosylamine-glycine ligase; PDBTitle: crystal structure of phosphoribosylamine-glycine ligase from ehrlichia chaffeensis
27	d2cg4a2		not modelled	23.6	8	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain PDB header: transferase

28	c3dcjA	Alignment	not modelled	20.9	25	Chain: A: PDB Molecule: probable 5'-phosphoribosylglycinamide PDBTitle: crystal structure of glycynamide formyltransferase (purn)2 from mycobacterium tuberculosis in complex with 5-methyl-5,3,6,7,8-tetrahydrofolic acid derivative
29	d1l1ga2	Alignment	not modelled	20.2	10	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain
30	d3bgsa1	Alignment	not modelled	20.1	31	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
31	c2vosA	Alignment	not modelled	18.6	13	PDB header: ligase Chain: A: PDB Molecule: foly polyglutamate synthase protein folc; PDBTitle: mycobacterium tuberculosis foly polyglutamate synthase2 complexed with adp
32	d1pdoa	Alignment	not modelled	17.7	9	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: EIIA-man component-like
33	c3ragA	Alignment	not modelled	16.2	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein aaci_0196 from2 alicyclobacillus acidocaldarius subsp. acidocaldarius dsm 446
34	c2f3oB	Alignment	not modelled	15.8	18	PDB header: unknown function Chain: B: PDB Molecule: pyruvate formate-lyase 2; PDBTitle: crystal structure of a glycyl radical enzyme from archaeoglobus2 fulgidus
35	c3n0vD	Alignment	not modelled	15.8	18	PDB header: hydrolase Chain: D: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of a formyltetrahydrofolate deformylase (pp_0327)2 from pseudomonas putida kt2440 at 2.25 a resolution
36	d1r9da	Alignment	not modelled	15.6	19	Fold: PFL-like glycyl radical enzymes Superfamily: PFL-like glycyl radical enzymes Family: PFL-like
37	c2y8nC	Alignment	not modelled	15.4	17	PDB header: lyase Chain: C: PDB Molecule: 4-hydroxyphenylacetate decarboxylase large subunit; PDBTitle: crystal structure of glycyl radical enzyme
38	d1e5ma1	Alignment	not modelled	15.0	20	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
39	c2e7xA	Alignment	not modelled	14.6	11	PDB header: transcription regulator Chain: A: PDB Molecule: 150aa long hypothetical transcriptional regulator; PDBTitle: structure of the lrp/asnc like transcriptional regulator from2 sulfolobus tokodaii 7 complexed with its cognate ligand
40	c3iouB	Alignment	not modelled	14.6	14	PDB header: hydrolase Chain: B: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of formyltetrahydrofolate deformylase (yp_105254.1)2 from burkholderia mallei atcc 23344 at 1.90 a resolution
41	c3ca8B	Alignment	not modelled	14.0	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein ydcf; PDBTitle: crystal structure of escherichia coli ydcf, an s-adenosyl-l-methionine2 utilizing enzyme
42	c3e7dC	Alignment	not modelled	13.4	18	PDB header: isomerase Chain: C: PDB Molecule: cobh, precorrin-8x methylmutase; PDBTitle: crystal structure of precorrin-8x methyl mutase cbic/cobh from2 brucella melitensis
43	c3lrfA	Alignment	not modelled	13.4	23	PDB header: transferase Chain: A: PDB Molecule: beta-ketoacyl synthase; PDBTitle: crystal structure of beta-ketoacyl synthase from brucella2 melitensis
44	c3a0rB	Alignment	not modelled	13.2	13	PDB header: transferase Chain: B: PDB Molecule: response regulator; PDBTitle: crystal structure of histidine kinase thka (tm1359) in complex with2 response regulator protein trra (tm1360)
45	d1umya	Alignment	not modelled	13.0	26	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
46	d1tqya1	Alignment	not modelled	12.9	23	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
47	c2puuD	Alignment	not modelled	12.1	17	PDB header: transcription Chain: D: PDB Molecule: propionate catabolism operon regulatory protein; PDBTitle: crystal structure of propionate catabolism operon2 regulatory protein prpr
48	d3ct6a1	Alignment	not modelled	12.0	13	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: DhaM-like
49	c2zayA	Alignment	not modelled	11.1	13	PDB header: signaling protein Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of response regulator from desulfuromonas2 acetoxidans
50	d1vrga1	Alignment	not modelled	11.1	14	Fold: CIP/crotonase Superfamily: CIP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
51	c3rhgA	Alignment	not modelled	10.7	8	PDB header: hydrolase Chain: A: PDB Molecule: putative phosphotriesterase; PDBTitle: crystal structure of amidohydrolase pm1525 (target efi-500319) from2 proteus mirabilis hi4320
52	c2jtqA	Alignment	not modelled	10.7	13	PDB header: transferase Chain: A: PDB Molecule: phage shock protein e; PDBTitle: rhodanese from e.coli
53	d1ou0a	Aliament	not modelled	10.7	13	Fold: Flavodoxin-like Superfamily: Precorrin-8X methylmutase CbiC/CobH

					Family: Precorrin-8X methylmutase CbiC/CobH
54	c2i82A		Alignment	not modelled	10.6
16					PDB header: de novo protein Chain: A: PDB Molecule: designed protein or32; PDBTitle: solution nmr structure of de novo designed protein, p-loop ntpase2 fold, northeast structural genomics consortium target or32
55	d2c1ha1		Alignment	not modelled	10.5
16					Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
56	d1p6qa		Alignment	not modelled	10.4
10					Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
57	c2nt3A		Alignment	not modelled	10.3
8					PDB header: signaling protein Chain: A: PDB Molecule: response regulator homolog; PDBTitle: receiver domain from myxococcus xanthus social motility protein frzs2 (y102a mutant)
58	c2zbcH		Alignment	not modelled	10.3
12					PDB header: transcription Chain: H: PDB Molecule: 83aa long hypothetical transcriptional regulator asnc; PDBTitle: crystal structure of sts042, a stand-alone ram module protein, from2 hyperthermophilic archaeon sulfolobus tokodaii strain7.
59	c3gdwA		Alignment	not modelled	10.3
8					PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sigma-54 interaction domain protein; PDBTitle: crystal structure of sigma-54 interaction domain protein from2 enterococcus faecalis
60	d2gfa1		Alignment	not modelled	10.2
23					Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
61	c3o1IB		Alignment	not modelled	9.9
25					PDB header: hydrolase Chain: B: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of a formyltetrahydrofolate deformylase (psptc_4314)2 from pseudomonas syringae pv. tomato str. dc3000 at 2.20 a resolution
62	c2rirA		Alignment	not modelled	9.6
23					PDB header: oxidoreductase Chain: A: PDB Molecule: dipicolinate synthase, a chain; PDBTitle: crystal structure of dipicolinate synthase, a chain, from bacillus2 subtilis
63	d2gaxa1		Alignment	not modelled	9.5
9					Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
64	d1fmta2		Alignment	not modelled	9.3
23					Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
65	d1ofux		Alignment	not modelled	9.1
26					Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Bacterial cell division inhibitor SulA
66	d2vbaa1		Alignment	not modelled	9.0
18					Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
67	c2djwF		Alignment	not modelled	8.9
12					PDB header: unknown function Chain: F: PDB Molecule: probable transcriptional regulator, asnc family; PDBTitle: crystal structure of ttha0845 from thermus thermophilus hb8
68	d3pnpa		Alignment	not modelled	8.9
29					Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
69	c3c97A		Alignment	not modelled	8.8
13					PDB header: signaling protein, transferase Chain: A: PDB Molecule: signal transduction histidine kinase; PDBTitle: crystal structure of the response regulator receiver domain2 of a signal transduction histidine kinase from aspergillus3 oryzae
70	d1l6sa		Alignment	not modelled	8.8
15					Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
71	d1zesal		Alignment	not modelled	8.8
9					Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
72	c4a1oB		Alignment	not modelled	8.2
17					PDB header: transferase-hydrolase Chain: B: PDB Molecule: bifunctional purine biosynthesis protein purh; PDBTitle: crystal structure of mycobacterium tuberculosis purh complexed with2 aicar and a novel nucleotide cfair, at 2.48 a resolution.
73	d1p3y1		Alignment	not modelled	8.2
10					Fold: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Superfamily: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Family: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
74	c2e0cA		Alignment	not modelled	8.2
15					PDB header: oxidoreductase Chain: A: PDB Molecule: 409aa long hypothetical nadp-dependent isocitrate PDBTitle: crystal structure of isocitrate dehydrogenase from sulfolobus tokodaii2 strain7 at 2.0 a resolution
75	c1yr3A		Alignment	not modelled	8.1
29					PDB header: transferase Chain: A: PDB Molecule: xanthosine phosphorylase; PDBTitle: escherichia coli purine nucleoside phosphorylase ii, the2 product of the xapa gene
76	d2dx7a1		Alignment	not modelled	7.9
14					Fold: ATC-like Superfamily: Aspartate/glutamate racemase Family: Aspartate/glutamate racemase
					Fold: Thiolase-like

77	d2ix4a1		Alignment	not modelled	7.8	36	Superfamily: Thiolase-like Family: Thiolase-related
78	c2buiC		Alignment	not modelled	7.7	18	PDB header: synthase Chain: C: PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] synthase i; PDBTitle: e.coli beta-ketoacyl (acyl carrier protein) synthase i in2 complex with octanoic acid, 120k
79	c3ktmA		Alignment	not modelled	7.6	12	PDB header: transcription regulator Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of response regulator receiver protein2 from <i>pseudoalteromonas atlantica</i>
80	c2uv9B		Alignment	not modelled	7.3	34	PDB header: transferase Chain: B: PDB Molecule: fatty acid synthase alpha subunits; PDBTitle: crystal structure of fatty acid synthase from <i>thermomyces2 lanuginosus</i> at 3.1 angstrom resolution. this file contains3 the alpha subunits of the fatty acid synthase. the entire4 crystal structure consists of one heterododecameric fatty5 acid synthase and is described in remark 400
81	c1cr6A		Alignment	not modelled	7.1	24	PDB header: hydrolase Chain: A: PDB Molecule: epoxide hydrolase; PDBTitle: crystal structure of murine soluble epoxide hydrolase2 complexed with cpu inhibitor
82	c2l2qA		Alignment	not modelled	7.1	15	PDB header: transferase Chain: A: PDB Molecule: pts system, cellobiose-specific iib component (cela); PDBTitle: solution structure of cellobiose-specific phosphotransferase iib2 component protein from <i>borrelia burgdorferi</i>
83	c3n53B		Alignment	not modelled	7.1	11	PDB header: transcription Chain: B: PDB Molecule: response regulator receiver modulated diguanylate cyclase; PDBTitle: crystal structure of a response regulator receiver modulated2 diguanylate cyclase from <i>pelobacter carbinolicus</i>
84	c3p9xB		Alignment	not modelled	7.0	13	PDB header: transferase Chain: B: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: crystal structure of phosphoribosylglycinamide formyltransferase from2 <i>bacillus halodurans</i>
85	d1vc1a		Alignment	not modelled	7.0	11	Fold: Spollaa-like Superfamily: Spollaa-like Family: Anti-sigma factor antagonist Spollaa
86	c2e1aD		Alignment	not modelled	6.9	12	PDB header: transcription Chain: D: PDB Molecule: 75aa long hypothetical regulatory protein asnc; PDBTitle: crystal structure of ffrp-dm1
87	d1wu2a3		Alignment	not modelled	6.9	33	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
88	d2pjua1		Alignment	not modelled	6.8	16	Fold: Chelatase-like Superfamily: PrpR receptor domain-like Family: PrpR receptor domain-like
89	c3nhzA		Alignment	not modelled	6.7	6	PDB header: dna binding protein Chain: A: PDB Molecule: two component system transcriptional regulator mtra; PDBTitle: structure of n-terminal domain of mtra
90	c3ouza		Alignment	not modelled	6.6	16	PDB header: ligase Chain: A: PDB Molecule: biotin carboxylase; PDBTitle: crystal structure of biotin carboxylase-adp complex from <i>campylobacter2 jejuni</i>
91	d1uz5a3		Alignment	not modelled	6.5	64	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
92	d1gega		Alignment	not modelled	6.4	10	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
93	d1gzga		Alignment	not modelled	6.4	19	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
94	d1m3ua		Alignment	not modelled	6.3	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Ketopantoate hydroxymethyltransferase PanB
95	d1v9ca		Alignment	not modelled	6.3	30	Fold: Flavodoxin-like Superfamily: Precorrin-8X methylmutase CbiC/CobH Family: Precorrin-8X methylmutase CbiC/CobH
96	c3iprC		Alignment	not modelled	6.3	10	PDB header: transferase Chain: C: PDB Molecule: pts system, iia component; PDBTitle: crystal structure of the <i>enterococcus faecalis</i> gluconate2 specific elia phosphotransferase system component
97	d1j3na1		Alignment	not modelled	6.3	20	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
98	d1h7na		Alignment	not modelled	6.1	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
99	c3tqrA		Alignment	not modelled	6.1	12	PDB header: transferase Chain: A: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: structure of the phosphoribosylglycinamide formyltransferase (purn) in2 complex with ches from <i>coxiella burnetii</i>