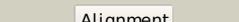
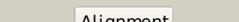
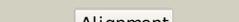
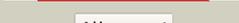
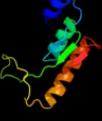
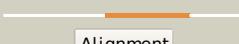
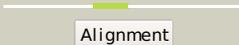
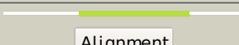
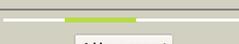
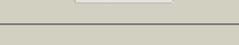


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0A867
Date	Thu Jan 5 11:07:01 GMT 2012
Unique Job ID	0fad015bd1937197

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1onra_	 Alignment		100.0	64	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
2	d2e1da1	 Alignment		100.0	60	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
3	d1f05a_	 Alignment		100.0	60	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
4	c3m16A_	 Alignment		100.0	57	PDB header: transferase Chain: A: PDB Molecule: transaldolase; PDBTitle: structure of a transaldolase from oleispira antarctica
5	c3igxA_	 Alignment		100.0	48	PDB header: transferase Chain: A: PDB Molecule: transaldolase; PDBTitle: 1.85 angstrom resolution crystal structure of transaldolase b (tala)2 from francisella tularensis.
6	c3hjaA_	 Alignment		100.0	51	PDB header: transferase Chain: A: PDB Molecule: transaldolase b; PDBTitle: the structure of an aldolase from prochlorococcus marinus
7	c3cq0B_	 Alignment		100.0	55	PDB header: transferase Chain: B: PDB Molecule: putative transaldolase ygr043c; PDBTitle: crystal structure of tal2_ yeast
8	c3clmA_	 Alignment		100.0	26	PDB header: lyase Chain: A: PDB Molecule: transaldolase; PDBTitle: crystal structure of transaldolase (yp_208650.1) from neisseria2 gonorrhoeae fa 1090 at 1.14 a resolution
9	c3s1vD_	 Alignment		100.0	40	PDB header: transferase Chain: D: PDB Molecule: probable transaldolase; PDBTitle: transaldolase from thermoplasma acidophilum in complex with d-fructose2 6-phosphate schiff-base intermediate
10	d1vpxa_	 Alignment		100.0	37	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
11	d1l6wa_	 Alignment		100.0	25	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase

12	d1wx0a1	 Alignment		100.0	34	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
13	d1xm3a_	 Alignment		94.6	20	Fold: TIM beta/alpha-barrel Superfamily: ThiG-like Family: ThiG-like
14	c2htmB_	 Alignment		90.9	18	PDB header: biosynthetic protein Chain: B: PDB Molecule: thiazole biosynthesis protein thig; PDBTitle: crystal structure of ttha0676 from thermus thermophilus hb8
15	c2p10D_	 Alignment		87.2	18	PDB header: hydrolase Chain: D: PDB Molecule: ml19387 protein; PDBTitle: crystal structure of a putative phosphonopyruvate hydrolase (ml19387)2 from mesorhizobium loti maff303099 at 2.15 a resolution
16	c1o4uA_	 Alignment		83.2	17	PDB header: transferase Chain: A: PDB Molecule: type ii quinolic acid phosphoribosyltransferase; PDBTitle: crystal structure of a nicotinate nucleotide pyrophosphorylase2 (tm1645) from thermotoga maritima at 2.50 a resolution
17	d2p10a1	 Alignment		82.6	25	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Ml19387-like
18	d1o4ua1	 Alignment		77.1	15	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
19	c2jbmA_	 Alignment		76.8	19	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: qprtase structure from human
20	c1ofaB_	 Alignment		74.3	24	PDB header: lyase Chain: B: PDB Molecule: phospho-2-dehydro-3-deoxyheptonate aldolase; PDBTitle: crystal structure of the tyrosine-regulated2 3-deoxy-d-arabino-heptulosonate-7-phosphate synthase3 from saccharomyces cerevisiae in complex with4 phosphoenolpyruvate and cobalt(ii)
21	d1cjca2	 Alignment	not modelled	67.2	19	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: N-terminal domain of adrenodoxin reductase-like
22	d1wa3a1	 Alignment	not modelled	62.8	19	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
23	d1of8a_	 Alignment	not modelled	61.6	24	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
24	d1m5wa_	 Alignment	not modelled	60.8	17	Fold: TIM beta/alpha-barrel Superfamily: Pyridoxine 5'-phosphate synthase Family: Pyridoxine 5'-phosphate synthase
25	c3labA_	 Alignment	not modelled	58.0	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative kdpq (2-keto-3-deoxy-6-phosphogluconate) PDBTitle: crystal structure of a putative kdpq (2-keto-3-deoxy-6-2 phosphogluconate) aldolase from oleispira antarctica
26	c3o6cA_	 Alignment	not modelled	57.0	14	PDB header: transferase Chain: A: PDB Molecule: pyridoxine 5'-phosphate synthase; PDBTitle: pyridoxal phosphate biosynthetic protein pdxj from campylobacter2 jejuni
27	c2yw3E_	 Alignment	not modelled	54.0	30	PDB header: lyase Chain: E: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase/2-dehydro-3-oxoglutarate aldolase/2-2 deydro-3-deoxyphosphogluconate aldolase from tthb1
28	d1vc4a_	 Alignment	not modelled	51.6	15	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel

						Family:Tryptophan biosynthesis enzymes
29	c3gk0H	Alignment	not modelled	50.3	19	PDB header: transferase Chain: H: PDB Molecule: pyridoxine 5'-phosphate synthase; PDBTitle: crystal structure of pyridoxal phosphate biosynthetic2 protein from burkholderia pseudomallei
30	dl066a	Alignment	not modelled	49.1	22	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Ketopantoate hydroxymethyltransferase PanB
31	clqpoA	Alignment	not modelled	48.2	13	PDB header: transferase Chain: A: PDB Molecule: quinolinate acid phosphoribosyl transferase; PDBTitle: quinolinate phosphoribosyl transferase (qaprtase) apo-enzyme from2 mycobacterium tuberculosis
32	clcjcA	Alignment	not modelled	48.0	19	PDB header: oxidoreductase Chain: A: PDB Molecule: protein (adrenodoxin reductase); PDBTitle: structure of adrenodoxin reductase of mitochondrial p4502 systems
33	clx1oC	Alignment	not modelled	46.3	17	PDB header: transferase Chain: C: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of project id tt0268 from thermus thermophilus hb8
34	c3sz8D	Alignment	not modelled	44.5	13	PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 2; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from2 burkholderia pseudomallei
35	dlnkua	Alignment	not modelled	44.1	25	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: 3-Methyladenine DNA glycosylase I (Tag)
36	clps9A	Alignment	not modelled	43.6	26	PDB header: oxidoreductase Chain: A: PDB Molecule: 2,4-dienoyl-coa reductase; PDBTitle: the crystal structure and reaction mechanism of e. coli 2,4-2 dienoyl coa reductase
37	c3ez4B	Alignment	not modelled	43.0	19	PDB header: transferase Chain: B: PDB Molecule: 3-methyl-2-oxobutanoate hydroxymethyltransferase; PDBTitle: crystal structure of 3-methyl-2-oxobutanoate2 hydroxymethyltransferase from burkholderia pseudomallei
38	c2b7pA	Alignment	not modelled	40.3	18	PDB header: transferase Chain: A: PDB Molecule: probable nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of quinolinic acid phosphoribosyltransferase from2 helicobacter pylori
39	c3pajA	Alignment	not modelled	39.6	15	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase, carboxylating; PDBTitle: 2.00 angstrom resolution crystal structure of a quinolinate2 phosphoribosyltransferase from vibrio cholerae o1 biovar eltor str.3 n16961
40	d1vhca	Alignment	not modelled	39.5	9	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
41	d1mxsa	Alignment	not modelled	39.3	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
42	c3ef6A	Alignment	not modelled	39.1	23	PDB header: oxidoreductase Chain: A: PDB Molecule: toluene 1,2-dioxygenase system ferredoxin--nad(+) PDBTitle: crystal structure of toluene 2,3-dioxygenase reductase
43	c2v3aA	Alignment	not modelled	38.6	19	PDB header: oxidoreductase Chain: A: PDB Molecule: rubredoxin reductase; PDBTitle: crystal structure of rubredoxin reductase from pseudomonas2 aeruginosa.
44	d1qpoa1	Alignment	not modelled	37.8	13	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
45	d1wbha1	Alignment	not modelled	37.1	19	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
46	c3llvA	Alignment	not modelled	36.0	10	PDB header: nad(p) binding protein Chain: A: PDB Molecule: exopolyphosphatase-related protein; PDBTitle: the crystal structure of the nad(p)-binding domain of an2 exopolyphosphatase-related protein from archaeoglobus fulgidus to3 1.7a
47	c3ffsC	Alignment	not modelled	33.9	16	PDB header: oxidoreductase Chain: C: PDB Molecule: inosine-5-monophosphate dehydrogenase; PDBTitle: the crystal structure of cryptosporidium parvum inosine-5'-2 monophosphate dehydrogenase
48	d1f61a	Alignment	not modelled	33.9	17	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate mutase/isocitrate lyase-like
49	c2gr2A	Alignment	not modelled	32.7	19	PDB header: oxidoreductase Chain: A: PDB Molecule: ferredoxin reductase; PDBTitle: crystal structure of ferredoxin reductase, bpha4 (oxidized form)
50	d1itza3	Alignment	not modelled	30.9	30	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Transketolase C-terminal domain-like
51	c2jg6A	Alignment	not modelled	30.8	18	PDB header: hydrolase Chain: A: PDB Molecule: dna-3-methyladenine glycosidase; PDBTitle: crystal structure of a 3-methyladenine dna glycosylase i2 from staphylococcus aureus
52	d1bd3a	Alignment	not modelled	29.4	12	Fold: PRTase-like Superfamily: PRTase-like

					Family:Phosphoribosyltransferases (PRTases)
53	c3lxdA_	Alignment	not modelled	28.9	21 PDB header: oxidoreductase Chain: A: PDB Molecule: fad-dependent pyridine nucleotide-disulphide PDBTitle: crystal structure of ferredoxin reductase arr from novosphingobium2 aromaticivorans
54	d1pv8a_	Alignment	not modelled	27.7	24 Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
55	c1yqzA_	Alignment	not modelled	27.2	10 PDB header: oxidoreductase Chain: A: PDB Molecule: coenzyme a disulfide reductase; PDBTitle: structure of coenzyme a-disulfide reductase from2 staphylococcus aureus refined at 1.54 angstrom resolution
56	c3t4cD_	Alignment	not modelled	26.0	18 PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooc-tonate aldolase 1; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooc-tonate aldolase from2 burkholderia ambifaria
57	c1kbiB_	Alignment	not modelled	25.6	17 PDB header: oxidoreductase Chain: B: PDB Molecule: cytochrome b2; PDBTitle: crystallographic study of the recombinant flavin-binding domain of2 baker's yeast flavocytochrome b2: comparison with the intact wild-3 type enzyme
58	d1j5ta_	Alignment	not modelled	25.3	15 Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
59	c3l0gD_	Alignment	not modelled	25.3	19 PDB header: transferase Chain: D: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide pyrophosphorylase from2 ehrlichia chaffeensis at 2.05a resolution
60	d1wv2a_	Alignment	not modelled	24.8	19 Fold: TIM beta/alpha-barrel Superfamily: ThiG-like Family: ThiG-like
61	d1kbia1	Alignment	not modelled	24.5	18 Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
62	c1q1wA_	Alignment	not modelled	24.0	22 PDB header: oxidoreductase Chain: A: PDB Molecule: putidaredoxin reductase; PDBTitle: crystal structure of putidaredoxin reductase from2 pseudomonas putida
63	d1n8fa_	Alignment	not modelled	23.9	22 Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
64	c2p0iA_	Alignment	not modelled	23.3	16 PDB header: lyase Chain: A: PDB Molecule: l-rhamnonate dehydratase; PDBTitle: crystal structure of l-rhamnonate dehydratase from gibberella zeae
65	c1zcoA_	Alignment	not modelled	22.9	15 PDB header: lyase Chain: A: PDB Molecule: 2-dehydro-3-deoxyphosphoheptonate aldolase; PDBTitle: crystal structure of pyrococcus furiosus 3-deoxy-d-arabino-2 heptulose-7-phosphate synthase
66	c3hyxC_	Alignment	not modelled	22.9	19 PDB header: oxidoreductase Chain: C: PDB Molecule: sulfide-quinone reductase; PDBTitle: 3-d x-ray structure of the sulfide:quinone oxidoreductase from aquifex2 aeolicus in complex with aurachin c
67	d1d9ea_	Alignment	not modelled	22.1	19 Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
68	c3fg2P_	Alignment	not modelled	22.1	19 PDB header: oxidoreductase Chain: P: PDB Molecule: putative rubredoxin reductase; PDBTitle: crystal structure of ferredoxin reductase for the cyp199a2 system from2 rhodospseudomonas palustris
69	d2dw4a2	Alignment	not modelled	21.6	27 Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
70	d1b5qa1	Alignment	not modelled	21.3	29 Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
71	d1nu5a1	Alignment	not modelled	20.8	17 Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: D-glucarate dehydratase-like
72	c2hxtA_	Alignment	not modelled	20.4	15 PDB header: unknown function Chain: A: PDB Molecule: l-fuconate dehydratase; PDBTitle: crystal structure of l-fuconate dehydratase from xanthomonas2 campestris liganded with mg++ and d-erythronhydroxamate
73	d1iyna_	Alignment	not modelled	20.4	20 Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like
74	c2h2wA_	Alignment	not modelled	19.6	38 PDB header: transferase Chain: A: PDB Molecule: homoserine o-succinyltransferase; PDBTitle: crystal structure of homoserine o-succinyltransferase (ec 2.3.1.46)2 (homoserine o-transsuccinylase) (hts) (tm0881) from thermotoga3 maritima at 2.52 a resolution
75	c3tqkA_	Alignment	not modelled	19.6	28 PDB header: transferase Chain: A: PDB Molecule: phospho-2-dehydro-3-deoxyheptonate aldolase; PDBTitle: structure of phospho-2-dehydro-3-deoxyheptonate aldolase from2 francisella tularensis schu s4
76	d1nhpa2	Alignment	not modelled	19.5	24 Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains

77	c3bw2A_	Alignment	not modelled	19.5	15	PDB header: oxidoreductase Chain: A: PDB Molecule: 2-nitropropane dioxygenase; PDBTitle: crystal structures and site-directed mutagenesis study of nitroalkane2 oxidase from streptomyces ansochromogenes
78	d1eepa_	Alignment	not modelled	19.0	10	Fold: TIM beta/alpha-barrel Superfamily: Inosine monophosphate dehydrogenase (IMPDH) Family: Inosine monophosphate dehydrogenase (IMPDH)
79	d1oy0a_	Alignment	not modelled	18.8	24	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Ketopantoate hydroxymethyltransferase PanB
80	d1d7ya2	Alignment	not modelled	18.7	26	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
81	c3dmpD_	Alignment	not modelled	18.3	14	PDB header: transferase Chain: D: PDB Molecule: uracil phosphoribosyltransferase; PDBTitle: 2.6 a crystal structure of uracil phosphoribosyltransferase2 from burkholderia pseudomallei
82	c3ktcB_	Alignment	not modelled	17.9	15	PDB header: isomerase Chain: B: PDB Molecule: xylose isomerase; PDBTitle: crystal structure of putative sugar isomerase (yp_050048.1) from2 erwinia carotovora atroseptica scri1043 at 1.54 a resolution
83	c3gnnA_	Alignment	not modelled	17.3	14	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide2 pyrophosphorylase from burkholderi pseudomallei
84	d2flia1	Alignment	not modelled	17.2	16	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: D-ribulose-5-phosphate 3-epimerase
85	c3noyA_	Alignment	not modelled	16.4	14	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase; PDBTitle: crystal structure of ispg (gcpe)
86	c2bt7A_	Alignment	not modelled	16.1	29	PDB header: viral protein Chain: A: PDB Molecule: sigma c; PDBTitle: structure of the c-terminal receptor-binding domain of2 avian reovirus fibre sigma c, cd crystal form
87	d1qapa1	Alignment	not modelled	16.1	15	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
88	c3dg7B_	Alignment	not modelled	15.7	10	PDB header: isomerase Chain: B: PDB Molecule: muconate cycloisomerase; PDBTitle: crystal structure of muconate lactonizing enzyme from mucobacterium2 smegmatis complexed with muconolactone
89	c3rcyC_	Alignment	not modelled	15.6	14	PDB header: isomerase Chain: C: PDB Molecule: mandelate racemase/muconate lactonizing enzyme-like PDBTitle: crystal structure of mandelate racemase/muconate lactonizing enzyme-2 like protein from roseovarius sp. tm1035
90	c2v82A_	Alignment	not modelled	15.1	13	PDB header: lyase Chain: A: PDB Molecule: 2-dehydro-3-deoxy-6-phosphogalactonate aldolase; PDBTitle: kdpgal complexed to kdpgal
91	d1o5oa_	Alignment	not modelled	15.1	16	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
92	c2v5jB_	Alignment	not modelled	14.7	17	PDB header: lyase Chain: B: PDB Molecule: 2,4-dihydroxyhept-2-ene-1,7-dioic acid aldolase; PDBTitle: apo class ii aldolase hpch
93	d2csua3	Alignment	not modelled	14.5	20	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
94	c2oz3F_	Alignment	not modelled	14.5	21	PDB header: lyase Chain: F: PDB Molecule: mandelate racemase/muconate lactonizing enzyme; PDBTitle: crystal structure of l-rhamnonate dehydratase from azotobacter2 vinelandii
95	d1o60a_	Alignment	not modelled	14.4	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
96	c2zv3E_	Alignment	not modelled	14.4	18	PDB header: hydrolase Chain: E: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of project mj0051 from methanocaldococcus2 jannaschii dsm 2661
97	c1zfiA_	Alignment	not modelled	14.3	16	PDB header: oxidoreductase Chain: A: PDB Molecule: inosine monophosphate dehydrogenase; PDBTitle: inosine monophosphate dehydrogenase (impdh; ec 1.1.1.205) from2 streptococcus pyogenes
98	d1a9xa3	Alignment	not modelled	14.3	29	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
99	d1vkfa_	Alignment	not modelled	14.3	18	Fold: TIM beta/alpha-barrel Superfamily: GlPp-like Family: GlPp-like