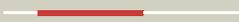
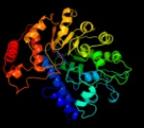
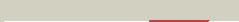


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P25665
Date	Thu Jan 5 11:42:13 GMT 2012
Unique Job ID	a846860cea4aae9d

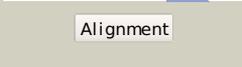
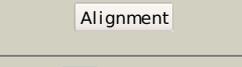
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1t7lA_	 Alignment		100.0	42	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydropteroyl triglutamate-- PDBTitle: crystal structure of cobalamin-independent methionine2 synthase from t. maritima
2	c3l7sA_	 Alignment		100.0	46	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydropteroyl triglutamate--homocysteine PDBTitle: crystal structure of mete coordinated with zinc from streptococcus2 mutans
3	c1u22A_	 Alignment		100.0	50	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydropteroyl triglutamate-- PDBTitle: a. thaliana cobalamin independent methionine synthase
4	c2nq5A_	 Alignment		100.0	46	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydropteroyl triglutamate-- PDBTitle: crystal structure of methyltransferase from streptococcus2 mutans
5	d1u1ha1	 Alignment		100.0	41	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Cobalamin-independent methionine synthase
6	d1u1ha2	 Alignment		100.0	58	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Cobalamin-independent methionine synthase
7	c3rpdB_	 Alignment		100.0	27	PDB header: transferase Chain: B: PDB Molecule: methionine synthase (b12-independent); PDBTitle: the structure of a b12-independent methionine synthase from shewanella2 sp. w3-18-1 in complex with selenomethionine.
8	c1ypxA_	 Alignment		100.0	19	PDB header: transferase Chain: A: PDB Molecule: putative vitamin-b12 independent methionine synthase family PDBTitle: crystal structure of the putative vitamin-b12 independent methionine2 synthase from listeria monocytogenes, northeast structural genomics3 target lmr13
9	d1j93a_	 Alignment		99.6	15	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Uroporphyrinogen decarboxylase, UROD
10	c3cyvA_	 Alignment		99.5	14	PDB header: lyase Chain: A: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 shigella flexineri: new insights into its catalytic3 mechanism
11	c1jpkA_	 Alignment		99.5	15	PDB header: lyase Chain: A: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: gly156asp mutant of human urod, human uroporphyrinogen iii2 decarboxylase

12	d1r3sa_	Alignment		99.4	17	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Uroporphyrinogen decarboxylase, UROD
13	c2infB_	Alignment		99.4	13	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 bacillus subtilis
14	c2ejaB_	Alignment		99.4	18	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 aquifex aeolicus
15	c3qc3B_	Alignment		93.7	15	PDB header: isomerase Chain: B: PDB Molecule: d-ribulose-5-phosphate-3-epimerase; PDBTitle: crystal structure of a d-ribulose-5-phosphate-3-epimerase (np_954699)2 from homo sapiens at 2.20 a resolution
16	d1rpxa_	Alignment		93.5	12	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: D-ribulose-5-phosphate 3-epimerase
17	d1h1ya_	Alignment		91.7	13	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: D-ribulose-5-phosphate 3-epimerase
18	c3inpA_	Alignment		91.7	11	PDB header: isomerase Chain: A: PDB Molecule: d-ribulose-phosphate 3-epimerase; PDBTitle: 2.05 angstrom resolution crystal structure of d-ribulose-phosphate 3-2 epimerase from francisella tularensis.
19	d1tqja_	Alignment		91.1	13	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: D-ribulose-5-phosphate 3-epimerase
20	c1yadD_	Alignment		90.4	8	PDB header: transcription Chain: D: PDB Molecule: regulatory protein teni; PDBTitle: structure of teni from bacillus subtilis
21	c3nm3D_	Alignment	not modelled	90.3	18	PDB header: transferase Chain: D: PDB Molecule: thiamine biosynthetic bifunctional enzyme; PDBTitle: the crystal structure of candida glabrata thi6, a bifunctional enzyme2 involved in thiamin biosynthesis of eukaryotes
22	c3ceuA_	Alignment	not modelled	90.3	8	PDB header: transferase Chain: A: PDB Molecule: thiamine phosphate pyrophosphorylase; PDBTitle: crystal structure of thiamine phosphate pyrophosphorylase2 (bt_0647) from bacteroides thetaiotaomicron. northeast3 structural genomics consortium target btr268
23	d1tqxa_	Alignment	not modelled	88.0	18	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: D-ribulose-5-phosphate 3-epimerase
24	d2tpsa_	Alignment	not modelled	87.7	18	Fold: TIM beta/alpha-barrel Superfamily: Thiamin phosphate synthase Family: Thiamin phosphate synthase
25	c3bolB_	Alignment	not modelled	84.6	14	PDB header: transferase Chain: B: PDB Molecule: 5-methyltetrahydrofolate s-homocysteine PDBTitle: cobalamin-dependent methionine synthase (1-566) from2 thermotoga maritima complexed with zn2+
26	c3cu2A_	Alignment	not modelled	80.7	19	PDB header: isomerase Chain: A: PDB Molecule: ribulose-5-phosphate 3-epimerase; PDBTitle: crystal structure of ribulose-5-phosphate 3-epimerase (yp_718263.1)2 from haemophilus somnus 129pt at 1.91 a resolution
27	c3lrmB_	Alignment	not modelled	80.2	13	PDB header: hydrolase Chain: B: PDB Molecule: alpha-galactosidase 1; PDBTitle: structure of alpha-galactosidase from saccharomyces cerevisiae with2 raffinose
						Fold: TIM beta/alpha-barrel

28	d1xi3a_	Alignment	not modelled	79.4	13	Superfamily: Thiamin phosphate synthase Family: Thiamin phosphate synthase
29	c3ipwA_	Alignment	not modelled	76.3	20	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase tatd family protein; PDBTitle: crystal structure of hydrolase tatd family protein from entamoeba2 histolytica
30	d1ojxa_	Alignment	not modelled	75.8	21	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
31	c3a23A_	Alignment	not modelled	75.5	17	PDB header: hydrolase Chain: A: PDB Molecule: putative secreted alpha-galactosidase; PDBTitle: crystal structure of beta-l-arabinopyranosidase complexed with d-2 galactose
32	c2ze3A_	Alignment	not modelled	71.9	15	PDB header: isomerase Chain: A: PDB Molecule: dfa0005; PDBTitle: crystal structure of dfa0005 complexed with alpha-ketoglutarate: a2 novel member of the icl/pepm superfamily from alkali-tolerant3 deinococcus ficus
33	c2bmbA_	Alignment	not modelled	70.9	13	PDB header: transferase Chain: A: PDB Molecule: folic acid synthesis protein fol1; PDBTitle: x-ray structure of the bifunctional 6-hydroxymethyl-7,8-2 dihydroxypterin pyrophosphokinase dihydropteroate synthase3 from saccharomyces cerevisiae
34	d3bofa2	Alignment	not modelled	69.2	14	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
35	c2h90A_	Alignment	not modelled	69.1	11	PDB header: oxidoreductase Chain: A: PDB Molecule: xenobiotic reductase a; PDBTitle: xenobiotic reductase a in complex with coumarin
36	d1ur4a_	Alignment	not modelled	63.3	16	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
37	d1r46a2	Alignment	not modelled	60.8	12	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
38	d2flia1	Alignment	not modelled	60.4	10	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: D-ribulose-5-phosphate 3-epimerase
39	d1uasa2	Alignment	not modelled	58.8	18	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
40	d1qapa1	Alignment	not modelled	57.9	20	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
41	c1bx2A_	Alignment	not modelled	57.0	17	PDB header: transferase Chain: A: PDB Molecule: dhps, dihydropteroate synthase; PDBTitle: dihydropteroate synthetase, with bound inhibitor manic, from bacillus2 anthracis
42	d1bx2a_	Alignment	not modelled	57.0	17	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
43	c3ct7E_	Alignment	not modelled	56.6	10	PDB header: isomerase Chain: E: PDB Molecule: d-allulose-6-phosphate 3-epimerase; PDBTitle: crystal structure of d-allulose 6-phosphate 3-epimerase2 from escherichia coli k-12
44	c2qjhH_	Alignment	not modelled	56.1	17	PDB header: lyase Chain: H: PDB Molecule: putative aldolase mj0400; PDBTitle: m. jannaschii adh synthase covalently bound to2 dihydroxyacetone phosphate
45	c3tr9A_	Alignment	not modelled	56.1	13	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: structure of a dihydropteroate synthase (folp) in complex with pteroi c2 acid from coxiella burnetii
46	d1ps9a1	Alignment	not modelled	55.3	15	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
47	c2jbmA_	Alignment	not modelled	54.3	16	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: qprtase structure from human
48	c1j0yD_	Alignment	not modelled	53.6	14	PDB header: hydrolase Chain: D: PDB Molecule: beta-amylase; PDBTitle: beta-amylase from bacillus cereus var. mycoides in complex2 with glucose
49	c1qapA_	Alignment	not modelled	53.6	20	PDB header: glycosyltransferase Chain: A: PDB Molecule: quinolinic acid phosphoribosyltransferase; PDBTitle: quinolinic acid phosphoribosyltransferase with bound2 quinolinic acid
50	c3l2iB_	Alignment	not modelled	53.5	14	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: 1.85 angstrom crystal structure of the 3-dehydroquinate dehydratase2 (arod) from salmonella typhimurium lt2.
51	c1ps9A_	Alignment	not modelled	52.7	15	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
52	c3a5vA_	Alignment	not modelled	52.3	12	PDB header: hydrolase Chain: A: PDB Molecule: alpha-galactosidase; PDBTitle: crystal structure of alpha-galactosidase i from mortierella vinacea
53	d1vema2	Alignment	not modelled	51.9	14	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain

54	c2gl0A_	Alignment	not modelled	51.5	32	PDB header: transferase Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: structure of pae2307 in complex with adenosine
55	c3hf3A_	Alignment	not modelled	50.4	12	PDB header: oxidoreductase Chain: A: PDB Molecule: chromate reductase; PDBTitle: old yellow enzyme from thermus scotoductus sa-01
56	c1o4uA_	Alignment	not modelled	47.1	11	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
57	c3e2vA_	Alignment	not modelled	45.7	18	PDB header: hydrolase Chain: A: PDB Molecule: 3'-5'-exonuclease; PDBTitle: crystal structure of an uncharacterized amidohydrolase from <i>Saccharomyces cerevisiae</i>
58	c2y5sA_	Alignment	not modelled	44.6	18	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of burkholderia cenocepacia dihydropteroate2 synthase complexed with 7,8-dihydropteroate.
59	c2d16B_	Alignment	not modelled	43.4	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein ph1918; PDBTitle: crystal structure of ph1918 protein from pyrococcus horikoshii ot3
60	c1x1oC_	Alignment	not modelled	42.7	21	PDB header: transferase Chain: C: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of project id tt0268 from thermus thermophilus hb8
61	d1e0ta2	Alignment	not modelled	42.4	15	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
62	d1o4ua1	Alignment	not modelled	41.7	11	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
63	d1vgga_	Alignment	not modelled	41.0	22	Fold: Ta1353-like Superfamily: Ta1353-like Family: Ta1353-like
64	c3f41B_	Alignment	not modelled	40.7	18	PDB header: hydrolase Chain: B: PDB Molecule: phytase; PDBTitle: structure of the tandemly repeated protein tyrosine2 phosphatase like phytase from mitsuokella multacida
65	d1rd5a_	Alignment	not modelled	40.3	20	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
66	c1djnB_	Alignment	not modelled	40.1	14	PDB header: oxidoreductase Chain: B: PDB Molecule: trimethylamine dehydrogenase; PDBTitle: structural and biochemical characterization of recombinant wild type2 trimethylamine dehydrogenase from methylphilus methylotrophus (sp.3 w3a1)
67	c2jvfA_	Alignment	not modelled	39.8	20	PDB header: de novo protein Chain: A: PDB Molecule: de novo protein m7; PDBTitle: solution structure of m7, a computationally-designed2 artificial protein
68	d1qopa_	Alignment	not modelled	39.6	16	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
69	c3bg3B_	Alignment	not modelled	37.9	12	PDB header: ligase Chain: B: PDB Molecule: pyruvate carboxylase, mitochondrial; PDBTitle: crystal structure of human pyruvate carboxylase (missing2 the biotin carboxylase domain at the n-terminus)
70	d1xcfa_	Alignment	not modelled	37.7	12	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
71	c3thaB_	Alignment	not modelled	35.1	17	PDB header: lyase Chain: B: PDB Molecule: tryptophan synthase alpha chain; PDBTitle: tryptophan synthase subunit alpha from campylobacter jejuni.
72	c3l0gD_	Alignment	not modelled	35.1	16	PDB header: transferase Chain: D: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide pyrophosphorylase from2 ehrlichia chaffeensis at 2.05a resolution
73	d1ad1a_	Alignment	not modelled	34.9	19	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
74	c3labA_	Alignment	not modelled	34.6	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative kdpG (2-keto-3-deoxy-6-phosphogluconate) PDBTitle: crystal structure of a putative kdpG (2-keto-3-deoxy-6-2-phosphogluconate) aldolase from oleispira antarctica
75	d1luca_	Alignment	not modelled	34.3	7	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Bacterial luciferase (alkanal monooxygenase)
76	c2b7pA_	Alignment	not modelled	34.3	16	PDB header: transferase Chain: A: PDB Molecule: probable nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of quinolinic acid phosphoribosyltransferase from2 helicobacter pylori
77	d1umya_	Alignment	not modelled	33.1	13	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
78	c2xioA_	Alignment	not modelled	32.6	18	PDB header: hydrolase Chain: A: PDB Molecule: putative deoxyribonuclease tatdn1; PDBTitle: structure of putative deoxyribonuclease tatdn1 isoform a

79	c2fcdA		Alignment	not modelled	31.0	13	PDB header: cell cycle Chain: A: PDB Molecule: myosin light chain 1; PDBTitle: solution structure of n-lobe myosin light chain from2 saccharomices cerevisiae
80	c3pajA		Alignment	not modelled	30.7	20	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
81	c1mh3A		Alignment	not modelled	29.8	12	PDB header: sugar binding, dna binding protein Chain: A: PDB Molecule: maltose binding-a1 homeodomain protein chimera; PDBTitle: maltose binding-a1 homeodomain protein chimera, crystal2 form i
82	c3js3C		Alignment	not modelled	28.8	13	PDB header: lyase Chain: C: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: crystal structure of type i 3-dehydroquinate dehydratase (arod) from2 clostridium difficile with covalent reaction intermediate
83	d3bofa1		Alignment	not modelled	28.3	13	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Methyltetrahydrofolate-utilizing methyltransferases
84	c3o63B		Alignment	not modelled	27.4	18	PDB header: transferase Chain: B: PDB Molecule: probable thiamine-phosphate pyrophosphorylase; PDBTitle: crystal structure of thiamin phosphate synthase from mycobacterium2 tuberculosis
85	c3fpjA		Alignment	not modelled	27.4	16	PDB header: biosynthetic protein, transferase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of e81q mutant of mtnas in complex with s-2 adenosylmethionine
86	c2wdfA		Alignment	not modelled	26.9	17	PDB header: hydrolase Chain: A: PDB Molecule: sulfur oxidation protein soxb; PDBTitle: termus thermophilus sulfate thiohydrolase soxb
87	d1gqna		Alignment	not modelled	26.7	12	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
88	d1wa3a1		Alignment	not modelled	26.5	7	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
89	c1qysA		Alignment	not modelled	24.4	13	PDB header: de novo protein Chain: A: PDB Molecule: top7; PDBTitle: crystal structure of top7: a computationally designed2 protein with a novel fold
90	c3l5aA		Alignment	not modelled	24.2	15	PDB header: oxidoreductase Chain: A: PDB Molecule: nadh/flavin oxidoreductase/nadh oxidase; PDBTitle: crystal structure of a probable nadh-dependent flavin oxidoreductase2 from staphylococcus aureus
91	c3rhgA		Alignment	not modelled	23.8	13	PDB header: hydrolase Chain: A: PDB Molecule: putative phosphotriesterase; PDBTitle: crystal structure of amidohydrolase pmi1525 (target efi-500319) from2 proteus mirabilis hi4320
92	c2v82A		Alignment	not modelled	23.7	14	PDB header: lyase Chain: A: PDB Molecule: 2-dehydro-3-deoxy-6-phosphogalactonate aldolase; PDBTitle: kdpgal complexed to kdpgal
93	c2ekcA		Alignment	not modelled	23.4	20	PDB header: lyase Chain: A: PDB Molecule: tryptophan synthase alpha chain; PDBTitle: structural study of project id aq_1548 from aquifex aeolicus vf5
94	c3a98A		Alignment	not modelled	23.3	16	PDB header: signaling protein Chain: A: PDB Molecule: dedicator of cytokinesis protein 2; PDBTitle: crystal structure of the complex of the interacting regions of dock22 and elmo1
95	d1pkla2		Alignment	not modelled	23.1	16	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
96	c2yr1B		Alignment	not modelled	23.1	13	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: crystal structure of 3-dehydroquinate dehydratase from geobacillus2 kaustophilus hta426
97	d1vjia		Alignment	not modelled	22.9	13	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
98	d1piia1		Alignment	not modelled	22.4	16	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
99	d1ajza		Alignment	not modelled	21.7	20	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
100	c3gndC		Alignment	not modelled	21.7	15	PDB header: lyase Chain: C: PDB Molecule: aldolase lsrf; PDBTitle: crystal structure of e. coli lsrf in complex with ribulose-5-phosphate
101	d1qpoa1		Alignment	not modelled	21.4	16	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
102	c2vefB		Alignment	not modelled	21.3	21	PDB header: transferase Chain: B: PDB Molecule: dihydropteroate synthase; PDBTitle: dihydropteroate synthase from streptococcus pneumoniae