



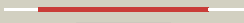














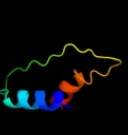


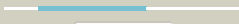


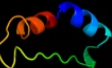















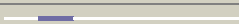

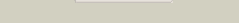
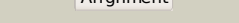

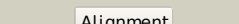

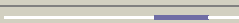


Phyre2

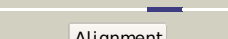
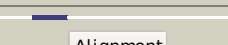


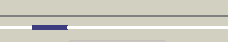

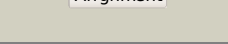
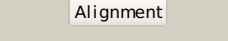


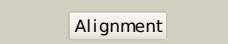

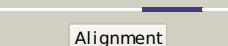


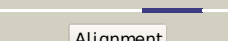
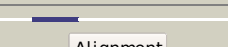
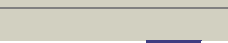
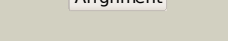
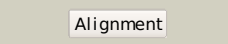
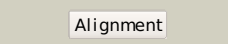


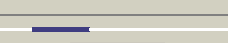


Email	I.a.kelley@imperial.ac.uk
Description	P45748
Date	Thu Jan 5 12:03:29 GMT 2012
Unique Job ID	deefea388e9df95c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2eqaA_	 Alignment		100.0	31	PDB header: rna binding protein Chain: A: PDB Molecule: hypothetical protein st1526; PDBTitle: crystal structure of the hypothetical sua5 protein from2 sulfolobus tokodaii
2	d1hrua_	 Alignment		100.0	99	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
3	d1k7ja_	 Alignment		100.0	24	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
4	d1jcua_	 Alignment		100.0	26	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
5	c3l7va_	 Alignment		100.0	15	PDB header: transcription Chain: A: PDB Molecule: putative uncharacterized protein smu.1377c; PDBTitle: crystal structure of a hypothetical protein smu.1377c from2 streptococcus mutans ua159
6	c3tsuA_	 Alignment		100.0	23	PDB header: transferase Chain: A: PDB Molecule: transcriptional regulatory protein; smu.1377c; PDBTitle: crystal structure of e. coli hypf with amp-pnp and carbamoyl phosphate
7	d1hq0a_	 Alignment		60.1	35	Fold: CNF1/YfiH-like putative cysteine hydrolases Superfamily: CNF1/YfiH-like putative cysteine hydrolases Family: Type 1 cytotoxic necrotizing factor, catalytic domain
8	c2qs0A_	 Alignment		58.6	20	PDB header: biosynthetic protein Chain: A: PDB Molecule: quinolinate synthetase a; PDBTitle: quinolinate synthase from pyrococcus furiosus
9	c3p3dA_	 Alignment		56.7	35	PDB header: nuclear protein Chain: A: PDB Molecule: nucleoporin 53; PDBTitle: crystal structure of the nup53 rrm domain from pichia guilliermondii
10	c2frxD_	 Alignment		42.6	24	PDB header: transferase Chain: D: PDB Molecule: hypothetical protein yebu; PDBTitle: crystal structure of yebu, a m5c rna methyltransferase from e.coli
11	c3mioA_	 Alignment		38.9	10	PDB header: lyase Chain: A: PDB Molecule: 3,4-dihydroxy-2-butanone 4-phosphate synthase; PDBTitle: crystal structure of 3,4-dihydroxy-2-butanone 4-phosphate synthase2 domain from mycobacterium tuberculosis at ph 6.00

12	d1t5la1	 Alignment		35.2	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
13	c3m4xA	 Alignment		34.9	23	PDB header: transferase Chain: A: PDB Molecule: nol1/nop2/sun family protein; PDBTitle: structure of a ribosomal methyltransferase
14	c3m6wA	 Alignment		31.0	26	PDB header: transferase Chain: A: PDB Molecule: rrna methylase; PDBTitle: multi-site-specific 16s rrna methyltransferase rsmf from thermus2 thermophilus in space group p21212 in complex with s-adenosyl-l-3 methionine
15	d1snna	 Alignment		28.7	20	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
16	c1sola	 Alignment		27.3	43	PDB header: actin-binding protein Chain: A: PDB Molecule: gelsolin (150-169); PDBTitle: a pip2 and f-actin-binding site of gelsolin, residue 150-2169 (nmr, averaged structure)
17	d1ixka	 Alignment		23.7	18	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: NOL1/NOP2/sun
18	c2oemA	 Alignment		17.4	12	PDB header: isomerase Chain: A: PDB Molecule: 2,3-diketo-5-methylthiopentyl-1-phosphate enolase; PDBTitle: crystal structure of a rubisco-like protein from geobacillus2 kaustophilus liganded with mg2+ and 2,3-diketo-hexane 1-phosphate
19	c2qi8B	 Alignment		17.3	16	PDB header: hydrolase Chain: B: PDB Molecule: mlr6093 protein; PDBTitle: crystal structure of an aspartoacylase family protein (mlr6093) from2 mesorhizobium loti maff303099 at 2.00 a resolution
20	d1k4ia	 Alignment		17.2	17	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
21	d1pg5a1	 Alignment	not modelled	17.1	8	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
22	d1sqga2	 Alignment	not modelled	16.9	23	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: NOL1/NOP2/sun
23	d1gk8a1	 Alignment	not modelled	16.2	15	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
24	c2yxlA	 Alignment	not modelled	16.1	22	PDB header: transferase Chain: A: PDB Molecule: 450aa long hypothetical fmu protein; PDBTitle: crystal structure of ph0851
25	c2y75F	 Alignment	not modelled	15.2	11	PDB header: transcription Chain: F: PDB Molecule: hth-type transcriptional regulator cymr; PDBTitle: the structure of cymr (yrzc) the global cysteine regulator2 of b. subtilis
26	c1sqgA	 Alignment	not modelled	15.0	18	PDB header: transferase Chain: A: PDB Molecule: sun protein; PDBTitle: the crystal structure of the e. coli fmu apoenzyme at 1.652 a resolution
27	c1pt9B	 Alignment	not modelled	14.5	11	PDB header: oxidoreductase Chain: B: PDB Molecule: nad(p) transhydrogenase, mitochondrial; PDBTitle: crystal structure analysis of the diii component of transhydrogenase2 with a thio-nicotinamide nucleotide analogue
28	d8ruca1	 Alignment	not modelled	14.0	17	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
						Fold: Single-stranded right-handed beta-helix

29	d1bhea_	Alignment	not modelled	13.8	8	Superfamily: Pectin lyase-like Family: Galacturonase
30	c3a4tA_	Alignment	not modelled	13.7	27	PDB header: transferase Chain: A: PDB Molecule: putative methyltransferase mj0026; PDBTitle: crystal structure of atm4 from m.jannaschii with sinefungin
31	c2vduE_	Alignment	not modelled	13.3	19	PDB header: transferase Chain: E: PDB Molecule: trna (guanine-n(7)-)-methyltransferase; PDBTitle: structure of trm8-trm82, the yeast trna m7g methylation2 complex
32	d1d4oa_	Alignment	not modelled	13.3	11	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Transhydrogenase domain III (dIII)
33	c2bruC_	Alignment	not modelled	12.4	17	PDB header: oxidoreductase Chain: C: PDB Molecule: nad(p) transhydrogenase subunit beta; PDBTitle: complex of the domain i and domain iii of escherichia coli2 transhydrogenase
34	d1pnoa_	Alignment	not modelled	11.7	21	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Transhydrogenase domain III (dIII)
35	d1q32a2	Alignment	not modelled	11.5	67	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
36	c3ckkA_	Alignment	not modelled	10.9	14	PDB header: transferase Chain: A: PDB Molecule: trna (guanine-n(7)-)-methyltransferase; PDBTitle: crystal structure of human methyltransferase-like protein 1
37	d1ylfa1	Alignment	not modelled	10.6	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcriptional regulator Rrf2
38	c3nwrA_	Alignment	not modelled	10.2	20	PDB header: lyase Chain: A: PDB Molecule: a rubisco-like protein; PDBTitle: crystal structure of a rubisco-like protein from burkholderia fungorum
39	d1jy1a2	Alignment	not modelled	10.1	67	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
40	d1tksa_	Alignment	not modelled	9.9	15	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
41	d1g57a_	Alignment	not modelled	9.7	12	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
42	d1bwva1	Alignment	not modelled	9.4	18	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
43	c3cgxA_	Alignment	not modelled	9.0	11	PDB header: transferase Chain: A: PDB Molecule: putative nucleotide-diphospho-sugar transferase; PDBTitle: crystal structure of putative nucleotide-diphospho-sugar transferase2 (yp_389115.1) from desulfovibrio desulfuricans g20 at 1.90 a3 resolution
44	d1yzha1	Alignment	not modelled	8.9	17	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: TrmB-like
45	d1ekxa1	Alignment	not modelled	8.8	11	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
46	c2eq8C_	Alignment	not modelled	8.6	26	PDB header: oxidoreductase Chain: C: PDB Molecule: pyruvate dehydrogenase complex, dihydrolipoamide PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdp
47	c3sq3C_	Alignment	not modelled	8.4	67	PDB header: hydrolase Chain: C: PDB Molecule: tyrosyl-dna phosphodiesterase 1; PDBTitle: crystal structure analysis of the yeast tyrosyl-dna phosphodiesterase2 h182a mutant
48	d1wzua1	Alignment	not modelled	8.3	25	Fold: NadA-like Superfamily: NadA-like Family: NadA-like
49	d1wdda1	Alignment	not modelled	8.3	16	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
50	c3fk4A_	Alignment	not modelled	8.3	17	PDB header: isomerase Chain: A: PDB Molecule: rubisco-like protein; PDBTitle: crystal structure of rubisco-like protein from bacillus2 cereus atcc 14579
51	d1vlva1	Alignment	not modelled	8.2	20	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
52	d1m0sa1	Alignment	not modelled	7.9	26	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
53	c1nopB_	Alignment	not modelled	7.8	67	PDB header: hydrolase/dna Chain: B: PDB Molecule: tyrosyl-dna phosphodiesterase 1; PDBTitle: crystal structure of human tyrosyl-dna phosphodiesterase2 (tdp1) in complex with vanadate, dna and a human3 topoisomerase i-derived peptide
54	d2ahua2	Alignment	not modelled	7.8	15	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like

55	c1q32C_		Alignment	not modelled	7.5	67	PDB header: replication,transcription,hydrolase Chain: C: PDB Molecule: tyrosyl-dna phosphodiesterase; PDBTitle: crystal structure analysis of the yeast tyrosyl-dna2 phosphodiesterase
56	d1rmga_		Alignment	not modelled	7.3	15	Fold: Single-stranded right-handed beta-helix Superfamily: Pectin lyase-like Family: Galacturonase
57	c3p04A_		Alignment	not modelled	7.1	0	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
58	d1rbla1		Alignment	not modelled	6.9	15	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
59	d1lk5a1		Alignment	not modelled	6.9	24	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
60	c2zv1B_		Alignment	not modelled	6.9	12	PDB header: isomerase Chain: B: PDB Molecule: 2,3-diketo-5-methylthiopentyl-1-phosphate PDBTitle: crystal structure of 2,3-diketo-5-methylthiopentyl-1-2 phosphate enolase from bacillus subtilis
61	c2ouiB_		Alignment	not modelled	6.8	14	PDB header: oxidoreductase Chain: B: PDB Molecule: nadp-dependent alcohol dehydrogenase; PDBTitle: d275p mutant of alcohol dehydrogenase from protozoa entamoeba2 histolytica
62	c2z99A_		Alignment	not modelled	6.8	16	PDB header: cell cycle Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of scpb from mycobacterium tuberculosis
63	d1ej711		Alignment	not modelled	6.8	15	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
64	c3caaB_		Alignment	not modelled	6.7	38	PDB header: serpin Chain: B: PDB Molecule: antichymotrypsin; PDBTitle: cleaved antichymotrypsin a347r
65	c3p04B_		Alignment	not modelled	6.5	0	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
66	d2d69a1		Alignment	not modelled	6.5	10	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
67	d2i09a2		Alignment	not modelled	6.4	40	Fold: DeoB insert domain-like Superfamily: DeoB insert domain-like Family: DeoB insert domain-like
68	d2hi6a1		Alignment	not modelled	6.4	22	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: AF0055-like
69	d1ykwa1		Alignment	not modelled	6.3	12	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
70	c3r3hA_		Alignment	not modelled	6.3	18	PDB header: transferase Chain: A: PDB Molecule: o-methyltransferase, sam-dependent; PDBTitle: crystal structure of o-methyltransferase from legionella pneumophila
71	c1zwvA_		Alignment	not modelled	6.2	12	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase component of branched- PDBTitle: solution structure of the subunit binding domain (hbsbd) of2 the human mitochondrial branched-chain alpha-ketoacid3 dehydrogenase
72	d2f06a1		Alignment	not modelled	6.1	21	Fold: Ferredoxin-like Superfamily: ACT-like Family: BT0572-like
73	d1bxna1		Alignment	not modelled	6.1	13	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
74	c3qfwB_		Alignment	not modelled	6.0	13	PDB header: lyase Chain: B: PDB Molecule: ribulose-1,5-bisphosphate carboxylase/oxygenase large PDBTitle: crystal structure of rubisco-like protein from rhodopseudomonas2 palustris
75	d1ml4a1		Alignment	not modelled	6.0	11	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
76	c3tfwB_		Alignment	not modelled	6.0	10	PDB header: transferase Chain: B: PDB Molecule: putative o-methyltransferase; PDBTitle: crystal structure of a putative o-methyltransferase from klebsiella2 pneumoniae
77	c1bwvA_		Alignment	not modelled	6.0	17	PDB header: lyase Chain: A: PDB Molecule: protein (ribulose bisphosphate carboxylase); PDBTitle: activated ribulose 1,5-bisphosphate carboxylase/oxygenase (rubisco)2 complexed with the reaction intermediate analogue 2-carboxyarabinitol3 1,5-bisphosphate
78	c3shoA_		Alignment	not modelled	5.9	27	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, rpri family; PDBTitle: crystal structure of rpri transcription factor from spheroobacter2 thermophilus (sugar isomerase domain)
79	c2h8bB_		Alignment	not modelled	5.6	43	PDB header: hormone/growth factor Chain: B: PDB Molecule: insulin-like 3; PDBTitle: solution structure of insl3
							Fold: SIS domain

80	dlnria_	Alignment	not modelled	5.6	9	Superfamily: SIS domain Family: mono-SIS domain
81	c1nriA_	Alignment	not modelled	5.6	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein hi0754; PDBTitle: crystal structure of putative phosphosugar isomerase hi0754 from <i>Haemophilus influenzae</i>
82	d2fcaa1	Alignment	not modelled	5.6	10	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: TrmB-like
83	c2dvzA_	Alignment	not modelled	5.5	23	PDB header: transport protein Chain: A: PDB Molecule: putative exported protein; PDBTitle: structure of a periplasmic transporter
84	d1otha1	Alignment	not modelled	5.5	20	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
85	d2hc5a1	Alignment	not modelled	5.3	23	Fold: FlaG-like Superfamily: FlaG-like Family: FlaG-like
86	d2c42a3	Alignment	not modelled	5.2	11	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Pyruvate-ferredoxin oxidoreductase, PFOR, domain II
87	c3sftA_	Alignment	not modelled	5.2	6	PDB header: hydrolase Chain: A: PDB Molecule: chemotaxis response regulator protein-glutamate PDBTitle: crystal structure of thermotoga maritima cheb methyltransferase catalytic2 domain
88	c3fs2A_	Alignment	not modelled	5.1	5	PDB header: transferase Chain: A: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate2 aldolase from <i>Brucella melitensis</i> at 1.85Å resolution
89	c3dxyA_	Alignment	not modelled	5.1	17	PDB header: transferase Chain: A: PDB Molecule: trna (guanine-n(7)-)-methyltransferase; PDBTitle: crystal structure of ectrmB in complex with sam