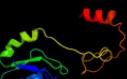
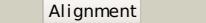
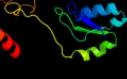
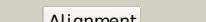
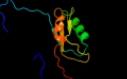
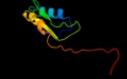
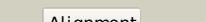
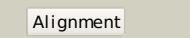
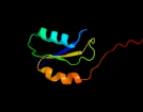
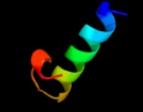


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	Q57261
Date	Thu Jan 5 12:37:16 GMT 2012
Unique Job ID	864b5dabd8592a80

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1sb7A_			100.0	99	PDB header: lyase Chain: A; PDB Molecule: tRNA pseudouridine synthase d; PDBTitle: crystal structure of the e.coli pseudouridine synthase truD
2	d1szwa_			100.0	99	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: tRNA pseudouridine synthase TruD
3	c1z2zB_			100.0	26	PDB header: lyase Chain: B; PDB Molecule: probable tRNA pseudouridine synthase d; PDBTitle: crystal structure of the putative tRNA pseudouridine2 synthase d (truD) from methanosaeca mazae, northeast3 structural genomics target mar1
4	d1k8wa5			86.5	12	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase II TruB
5	d1r3ea2			84.1	16	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase II TruB
6	d2cx6a1			83.6	16	Fold: Barstar-like Superfamily: Barstar-related Family: Barstar-related
7	c1sgvA_			81.8	16	PDB header: lyase Chain: A; PDB Molecule: tRNA pseudouridine synthase b; PDBTitle: structure of tRNA psi55 pseudouridine synthase (trub)
8	d2ey4a2			81.6	17	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase II TruB
9	d2apo2			78.3	16	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase II TruB
10	d1sgva2			75.0	15	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase II TruB
11	c1k8wA_			72.8	11	PDB header: lyase/rna Chain: A; PDB Molecule: tRNA pseudouridine synthase b; PDBTitle: crystal structure of the e.coli pseudouridine synthase2 trub bound to a t stem-loop rna

12	c1ze2B_			68.4	33	PDB header: lyase/rna Chain: B; PDB Molecule: tRNA pseudouridine synthase b; PDBTitle: conformational change of pseudouridine 55 synthase upon its2 association with rna substrate
13	d1ay7b_			62.7	20	Fold: Barstar-like Superfamily: Barstar-related Family: Barstar-related
14	c2apoA_			53.9	16	PDB header: isomerase/rna binding protein Chain: A; PDB Molecule: probable tRNA pseudouridine synthase b; PDBTitle: crystal structure of the methanococcus jannaschii cbf5 nop10 complex
15	c3uaiA_			48.5	10	PDB header: isomerase/chaperone Chain: A; PDB Molecule: h/aca ribonucleoprotein complex subunit 4; PDBTitle: structure of the shq1-cbf5-nop10-gar1 complex from saccharomyces2 cerevisiae
16	c2ey4A_			43.6	13	PDB header: isomerase/biosynthetic protein Chain: A; PDB Molecule: probable tRNA pseudouridine synthase b; PDBTitle: crystal structure of a cbf5-nop10-gar1 complex
17	d1yh5a1			38.7	19	Fold: YggU-like Superfamily: YggU-like Family: YggU-like
18	d1llda2			33.0	9	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
19	c2dceA_			31.2	12	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: kiaa1915 protein; PDBTitle: solution structure of the swirl domain of human kiaa19152 protein
20	d2j85a1			30.7	13	Fold: STIV B116-like Superfamily: STIV B116-like Family: STIV B116-like
21	d1mlda2		not modelled	26.9	13	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
22	c2km1A_		not modelled	26.6	19	PDB header: protein binding Chain: A; PDB Molecule: protein dre2; PDBTitle: solution structure of the n-terminal domain of the yeast protein dre2
23	d5mdha2		not modelled	26.3	14	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
24	d1utaa_		not modelled	26.2	15	Fold: Ferredoxin-like Superfamily: Sporulation related repeat Family: Sporulation related repeat
25	d1t2da2		not modelled	26.2	19	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
26	d2j6ba1		not modelled	26.0	14	Fold: STIV B116-like Superfamily: STIV B116-like Family: STIV B116-like
27	d1oc4a2		not modelled	25.8	18	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
28	c3kopB_		not modelled	25.5	29	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of protein with a cyclophilin-like fold2 (yp_831253.1) from arthrobacter sp. fb24 at 1.90 a resolution
29	d1ez4a2		not modelled	25.4	22	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like

					Family: Lactate & malate dehydrogenases, C-terminal domain
30	d1b8pa2	Alignment	not modelled	25.2	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
31	d1hyha2	Alignment	not modelled	25.0	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
32	c2v9vA_	Alignment	not modelled	24.9	PDB header: transcription Chain: A: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: crystal structure of moorella thermoacetica selb(377-511)
33	d7mdha2	Alignment	not modelled	24.7	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
34	c2kvra_	Alignment	not modelled	24.6	PDB header: protein binding Chain: A: PDB Molecule: ubiquitin carboxyl-terminal hydrolase 7; PDBTitle: solution nmr structure of human ubiquitin specific protease2 usp7 ubl domain (residues 537-664). nesg target hr4395c/3 sgc-toronto
35	d1gv0a2	Alignment	not modelled	24.6	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
36	c3hskB_	Alignment	not modelled	24.5	PDB header: oxidoreductase Chain: B: PDB Molecule: aspartate-semialdehyde dehydrogenase; PDBTitle: crystal structure of aspartate semialdehyde dehydrogenase2 with nadp from candida albicans
37	d1obba2	Alignment	not modelled	24.2	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: AglA-like glucosidase
38	d9ldta2	Alignment	not modelled	24.2	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
39	d2cmda2	Alignment	not modelled	24.0	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
40	d1guza2	Alignment	not modelled	22.9	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
41	d1o6za2	Alignment	not modelled	22.4	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
42	c3f1xA_	Alignment	not modelled	21.7	PDB header: transferase Chain: A: PDB Molecule: serine acetyltransferase; PDBTitle: three dimensional structure of the serine acetyltransferase from2 bacteroides vulgatus, northeast structural genomics consortium target3 bvr62.
43	d1uxja2	Alignment	not modelled	21.3	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
44	d1pzga2	Alignment	not modelled	21.2	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
45	d1civa2	Alignment	not modelled	21.1	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
46	d1hyea2	Alignment	not modelled	21.1	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
47	c3mpoD_	Alignment	not modelled	21.0	PDB header: hydrolase Chain: D: PDB Molecule: predicted hydrolase of the had superfamily; PDBTitle: the crystal structure of a hydrolase from lactobacillus brevis
48	d1y7ta2	Alignment	not modelled	21.0	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
49	d1i0za2	Alignment	not modelled	21.0	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
50	d1ldma2	Alignment	not modelled	20.9	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
51	d2dw4a1	Alignment	not modelled	20.8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: SWIRM domain
52	c3lhoA_	Alignment	not modelled	20.8	PDB header: hydrolase Chain: A: PDB Molecule: putative hydrolase; PDBTitle: crystal structure of putative hydrolase (yp_751971.1) from shewanella2 frigidimarina ncimb 400 at 1.80 a resolution
53	d1zpxw1	Alignment	not modelled	20.8	Fold: Ferredoxin-like Superfamily: TTP0101/SSO1404-like Family: TTP0101/SSO1404-like
54	d1w4xa1	Alignment	not modelled	20.6	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
55	d2nn4a1	Alignment	not modelled	20.1	Fold: YggQ-like Superfamily: YggQ-like Family: YggQ-like

56	d1ldna2	Alignment	not modelled	19.7	14	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
57	d1a5za2	Alignment	not modelled	19.7	19	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
58	d1llca2	Alignment	not modelled	19.7	21	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
59	d1l10a2	Alignment	not modelled	19.1	10	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
60	d2pg4a1	Alignment	not modelled	19.0	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: F93-like
61	c3cjIA_	Alignment	not modelled	18.6	24	PDB header: unknown function Chain: A: PDB Molecule: domain of unknown function; PDBTitle: crystal structure of a protein of unknown function (eca1910) from2 pectobacterium atrosepticum scri1043 at 2.20 a resolution
62	d2fq3a1	Alignment	not modelled	17.8	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: SWIRM domain
63	d2dkya1	Alignment	not modelled	17.3	18	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: Variant SAM domain
64	d2g17a1	Alignment	not modelled	17.0	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
65	d1vkna1	Alignment	not modelled	16.9	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
66	d2h80a1	Alignment	not modelled	16.6	18	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: Variant SAM domain
67	c2hjsA_	Alignment	not modelled	16.2	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: usg-1 protein homolog; PDBTitle: the structure of a probable aspartate-semialdehyde dehydrogenase from2 pseudomonas aeruginosa
68	d2v9va2	Alignment	not modelled	16.1	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
69	d2hjsa1	Alignment	not modelled	16.0	0	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
70	c2zv3E_	Alignment	not modelled	15.6	13	PDB header: hydrolase Chain: E: PDB Molecule: peptidyl-tRNA hydrolase; PDBTitle: crystal structure of project mj0051 from methanocaldococcus2 jannaschii dsm 2661
71	d2ox7a1	Alignment	not modelled	15.4	45	Fold: YopX-like Superfamily: YopX-like Family: YopX-like
72	d2ldxa2	Alignment	not modelled	15.4	5	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
73	c3kubA_	Alignment	not modelled	15.2	0	PDB header: oxidoreductase Chain: A: PDB Molecule: aspartate-semialdehyde dehydrogenase; PDBTitle: crystal structure of aspartate semi-aldehyde dehydrogenase complexed2 with glycerol and phosphate of mycobacterium tuberculosis h37rv
74	c1mb4B_	Alignment	not modelled	14.9	0	PDB header: oxidoreductase Chain: B: PDB Molecule: aspartate-semialdehyde dehydrogenase; PDBTitle: crystal structure of aspartate semialdehyde dehydrogenase2 from vibrio cholerae with nadp and s-methyl-l-cysteine3 sulfoxide
75	d1y6ja2	Alignment	not modelled	14.7	14	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
76	d2g49a1	Alignment	not modelled	14.7	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
77	c3h92A_	Alignment	not modelled	14.3	27	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized atp-binding protein mje115; PDBTitle: the crystal structure of one domain of the protein with unknown2 function from methanocaldococcus jannaschii
78	c2x4iA_	Alignment	not modelled	13.9	16	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein 114; PDBTitle: orf 114a from sulfolobus islandicus rudivirus 1
79	d2cvoa1	Alignment	not modelled	13.8	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
80	c3nwiC_	Alignment	not modelled	13.3	12	PDB header: transport protein Chain: C: PDB Molecule: zinc transport protein zntb; PDBTitle: the soluble domain structure of the zntb zn2+ efflux system
81	d1qlma_	Aliantment	not modelled	13.2	8	Fold: Methenyltetrahydromethanopterin cyclohydrolase Superfamily: Methenyltetrahydromethanopterin cyclohydrolase

						Family: Methenyltetrahydromethanopterin cyclohydrolase
82	c3t76A_	Alignment	not modelled	13.2	16	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator vanug; PDBTitle: crystal structure of transcriptional regulator vanug, form ii
83	d2dt5a1	Alignment	not modelled	13.1	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcriptional repressor Rex, N-terminal domain
84	c1t4bB_	Alignment	not modelled	12.9	0	PDB header: oxidoreductase Chain: B: PDB Molecule: aspartate-semialdehyde dehydrogenase; PDBTitle: 1.6 angstrom structure of escherichia coli aspartate-2 semialdehyde dehydrogenase.
85	d2p84a1	Alignment	not modelled	12.6	33	Fold: YopX-like Superfamily: YopX-like Family: YopX-like
86	d2hjja1	Alignment	not modelled	12.2	33	Fold: dsRBD-like Superfamily: YcfA/nrd intein domain Family: YkfF-like
87	c2hjja_	Alignment	not modelled	12.2	33	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ykff; PDBTitle: solution nmr structure of protein ykff from escherichia coli.2 northeast structural genomics target er397.
88	c3ofeB_	Alignment	not modelled	12.1	11	PDB header: chaperone Chain: B: PDB Molecule: ldlr chaperone boca; PDBTitle: structured domain of drosophila melanogaster boca p41 2 2 crystal form
89	c1jegB_	Alignment	not modelled	12.1	67	PDB header: transferase/hydrolase Chain: B: PDB Molecule: hematopoietic cell protein-tyrosine phosphatase PDBTitle: solution structure of the sh3 domain from c-terminal src2 kinase complexed with a peptide from the tyrosine3 phosphatase pep
90	d1xrsb2	Alignment	not modelled	12.0	44	Fold: Dodecin subunit-like Superfamily: D-lysine 5,6-aminomutase beta subunit KamE, N-terminal domain Family: D-lysine 5,6-aminomutase beta subunit KamE, N-terminal domain
91	c2gz3D_	Alignment	not modelled	11.8	0	PDB header: oxidoreductase Chain: D: PDB Molecule: aspartate beta-semialdehyde dehydrogenase; PDBTitle: structure of aspartate semialdehyde dehydrogenase (asadh) from2 streptococcus pneumoniae complexed with nadp and aspartate-3 semialdehyde
92	c2qyzA_	Alignment	not modelled	11.6	36	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the uncharacterized protein ctc02137 from2 clostridium tetani e88
93	d1up7a2	Alignment	not modelled	11.5	10	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: AglA-like glucosidase
94	d1s6ya2	Alignment	not modelled	11.5	38	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: AglA-like glucosidase
95	c3uw3A_	Alignment	not modelled	10.7	0	PDB header: oxidoreductase Chain: A: PDB Molecule: aspartate-semialdehyde dehydrogenase; PDBTitle: crystal structure of an aspartate-semialdehyde dehydrogenase from2 burkholderia thailandensis
96	c2wh7A_	Alignment	not modelled	10.5	38	PDB header: hydrolase Chain: A: PDB Molecule: hyaluronidase-phage associated; PDBTitle: the partial structure of a group a streptococcal phage-2 encoded tail fibre hyaluronate lyase hylp2
97	c2i9sA_	Alignment	not modelled	9.9	21	PDB header: chaperone Chain: A: PDB Molecule: mesoderm development candidate 2; PDBTitle: the solution structure of the core of mesoderm development2 (mesd).
98	c2w3pb_	Alignment	not modelled	9.6	36	PDB header: lyase Chain: B: PDB Molecule: benzoyl-coa-dihydrodiol lyase; PDBTitle: boxc crystal structure
99	c3gwdA_	Alignment	not modelled	9.3	44	PDB header: oxidoreductase Chain: A: PDB Molecule: cyclohexanone monooxygenase; PDBTitle: closed crystal structure of cyclohexanone monooxygenase