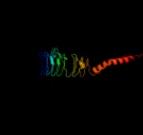
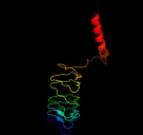
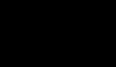


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P77181
Date	Thu Jan 5 12:26:03 GMT 2012
Unique Job ID	a60ef93799d53a0c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1v3wa_			100.0	37	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like
2	d1xhda_			100.0	31	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like
3	c3r3rA_			100.0	32	PDB header: transferase Chain: A: PDB Molecule: ferricyochelin binding protein; PDBTitle: structure of the yrda ferricyochelin binding protein from salmonella2 enterica
4	c3ixcA_			100.0	37	PDB header: transferase Chain: A: PDB Molecule: hexapeptide transferase family protein; PDBTitle: crystal structure of hexapeptide transferase family protein from2 anaplasma phagocytophilum
5	c3r1wA_			100.0	34	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of a carbonic anhydrase from a crude oil degrading2 psychrophilic library
6	c3i3aC_			100.0	17	PDB header: transferase Chain: C: PDB Molecule: acyl-[acyl-carrier-protein]-udp-n- PDBTitle: structural basis for the sugar nucleotide and acyl chain2 selectivity of leptospira interrogans lpxa
7	d2jf2a1			100.0	18	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase
8	c3r0sA_			100.0	14	PDB header: transferase Chain: A: PDB Molecule: acyl-[acyl-carrier-protein]-udp-n-acetylglucosamine o- PDBTitle: udp-n-acetylglucosamine acyltransferase from campylobacter jejuni
9	d1j2za_			100.0	16	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase
10	c2iu9C_			99.9	23	PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine PDBTitle: chlamydia trachomatis lpxd with 100mm udpGlcNAc (complex ii)
11	c3pmoA_			99.9	19	PDB header: transferase Chain: A: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine n-acyltransferase; PDBTitle: the structure of lpxd from pseudomonas aeruginosa at 1.3 a resolution

12	d1krra_	Alignment		99.9	23	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
13	c3ectA_	Alignment		99.9	22	PDB header: transferase Chain: A: PDB Molecule: hexapeptide-repeat containing-acetyltransferase; PDBTitle: crystal structure of the hexapeptide-repeat containing-2 acetyltransferase vca0836 from vibrio cholerae
14	c3eh0C_	Alignment		99.9	16	PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine n-acetyltransferase; PDBTitle: crystal structure of lpxd from escherichia coli
15	c3fttA_	Alignment		99.9	26	PDB header: transferase Chain: A: PDB Molecule: putative acetyltransferase sacol2570; PDBTitle: crystal structure of the galactoside o-acetyltransferase2 from staphylococcus aureus
16	c3iqyB_	Alignment		99.9	19	PDB header: transferase Chain: B: PDB Molecule: polysialic acid O-acetyltransferase; PDBTitle: crystal strucure of the polysia specific acetyltransferase neuo
17	c3srtB_	Alignment		99.9	18	PDB header: transferase Chain: B: PDB Molecule: maltose O-acetyltransferase; PDBTitle: the crystal structure of a maltose O-acetyltransferase from2 clostridium difficile 630
18	c2ic7A_	Alignment		99.9	21	PDB header: transferase Chain: A: PDB Molecule: maltose transacetylase; PDBTitle: crystal structure of maltose transacetylase from2 geobacillus kaustophilus
19	c3cj8B_	Alignment		99.9	29	PDB header: transferase Chain: B: PDB Molecule: 2,3,4,5-tetrahydropyridine-2-carboxylate n-acetyltransferase; PDBTitle: crystal structure of 2,3,4,5-tetrahydropyridine-2-carboxylate n-2 succinyltransferase from enterococcus faecalis v583
20	d1mr7a_	Alignment		99.9	17	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
21	d1ocxa_	Alignment	not modelled	99.9	22	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
22	d1xata_	Alignment	not modelled	99.9	16	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
23	c3c8vA_	Alignment	not modelled	99.9	21	PDB header: transferase Chain: A: PDB Molecule: putative acetyltransferase; PDBTitle: crystal structure of putative acetyltransferase (yp_390128.1) from2 desulfovibrio desulfuricans g20 at 2.28 a resolution
24	c3fsbB_	Alignment	not modelled	99.9	21	PDB header: transferase Chain: B: PDB Molecule: qdtc; PDBTitle: crystal structure of qdtc, the dtdp-3-amino-3,6-dideoxy-d-2 glucose n-acetyl transferase from thermoanaerobacterium3 thermosaccharolyticum in complex with coa and dtdp-3-amino-4 quinovose
25	d1g97a1	Alignment	not modelled	99.9	27	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
26	c2wlgA_	Alignment	not modelled	99.9	16	PDB header: transferase Chain: A: PDB Molecule: polysialic acid O-acetyltransferase; PDBTitle: crystallographic analysis of the polysialic acid O-acetyltransferase oatwy
27	c3mqhD_	Alignment	not modelled	99.9	26	PDB header: transferase Chain: D: PDB Molecule: lipopolysaccharides biosynthesis acetyltransferase; PDBTitle: crystal structure of the 3-n-acetyl transferase wlbb from bordetella2 petrii in complex with coa and udp-3-amino-2-acetamido-2,3-dideoxy3 glucuronic acid

28	c3eevC	Alignment	not modelled	99.9	19	PDB header: transferase Chain: C: PDB Molecule: chloramphenicol acetyltransferase; PDBTitle: crystal structure of chloramphenicol acetyltransferase vca0300 from2 vibrio cholerae o1 biovar eltor
29	c3kwdA	Alignment	not modelled	99.8	25	PDB header: lyase, protein binding, photosynthesis Chain: A: PDB Molecule: carbon dioxide concentrating mechanism protein; PDBTitle: inactive truncation of the beta-carboxysomal gamma-carbonic anhydrase,2 cmmm, form 1
30	c1qreA	Alignment	not modelled	99.8	25	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: a closer look at the active site of gamma-carbonic anhydrases: high2 resolution crystallographic studies of the carbonic anhydrase from3 methanoscincus thermophilus
31	d1grea	Alignment	not modelled	99.8	25	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like
32	d3bswa1	Alignment	not modelled	99.8	23	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: PglD-like
33	d2oi6a1	Alignment	not modelled	99.8	18	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
34	c1hm8A	Alignment	not modelled	99.8	15	PDB header: transferase Chain: A: PDB Molecule: udp-n-acetylglucosamine-1-phosphate uridyltransferase; PDBTitle: crystal structure of s.pneumoniae n-acetylglucosamine-1-phosphate2 uridyltransferase, glmu, bound to acetyl coenzyme a
35	d1t3da	Alignment	not modelled	99.8	21	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase
36	c1t3dB	Alignment	not modelled	99.8	21	PDB header: transferase Chain: B: PDB Molecule: serine acetyltransferase; PDBTitle: crystal structure of serine acetyltransferase from e.coli at 2.2a
37	d1ssqa	Alignment	not modelled	99.8	21	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase
38	c3mc4A	Alignment	not modelled	99.8	33	PDB header: transferase Chain: A: PDB Molecule: ww/rsp5/wwp domain:bacterial transferase PDBTitle: crystal structure of ww/rsp5/wwp domain: bacterial2 transferase hexapeptide repeat: serine o-acetyltransferase3 from brucella melitensis
39	c2oi6A	Alignment	not modelled	99.8	17	PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: e. coli glmu- complex with udp-glcnac, coa and glcn-1-po4
40	c2v0hA	Alignment	not modelled	99.8	18	PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: characterization of substrate binding and catalysis of the2 potential antibacterial target n-acetylglucosamine-1-3 phosphate uridyltransferase (glmu)
41	d3tdta	Alignment	not modelled	99.7	20	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Tetrahydroadipicoline-N-succinyltransferase, THDP-succinyltransferase, DapD
42	c3eg4A	Alignment	not modelled	99.7	20	PDB header: transferase Chain: A: PDB Molecule: 2,3,4,5-tetrahydropyridine-2,6-dicarboxylate n- PDBTitle: crystal structure of 2,3,4,5-tetrahydropyridine-2-2 carboxylate n-succinyltransferase from brucella melitensis3 biovar abortus 2308
43	c3q1xA	Alignment	not modelled	99.6	17	PDB header: transferase Chain: A: PDB Molecule: serine acetyltransferase; PDBTitle: crystal structure of entamoeba histolytica serine acetyltransferase 12 in complex with l-serine
44	c3f1xA	Alignment	not modelled	99.6	22	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.
45	c3d98A	Alignment	not modelled	99.5	20	PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: crystal structure of glmu from mycobacterium tuberculosis, ligand-free2 form
46	c3fsyC	Alignment	not modelled	99.4	19	PDB header: transferase Chain: C: PDB Molecule: tetrahydroadipicoline n-succinyltransferase; PDBTitle: structure of tetrahydroadipicoline n-succinyltransferase2 (rv1201c;dapd) in complex with succinyl-coa from mycobacterium3 tuberculosis
47	c2qkxA	Alignment	not modelled	99.4	20	PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: n-acetyl glucosamine 1-phosphate uridyltransferase from mycobacterium2 tuberculosis complex with n-acetyl glucosamine 1-phosphate
48	c2ggqA	Alignment	not modelled	99.3	22	PDB header: transferase Chain: A: PDB Molecule: 401aa long hypothetical glucose-1-phosphate PDBTitle: complex of hypothetical glucose-1-phosphate thymidyltransferase from2 sulfolobus tokodaii
49	d2f9ca1	Alignment	not modelled	99.3	7	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: YdcK-like
50	d1yp2a1	Alignment	not modelled	99.3	14	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like

51	c1yp3C_		Alignment	not modelled	99.1	15	PDB header: transferase Chain: C; PDB Molecule: glucose-1-phosphate adenylyltransferase small PDBTitle: crystal structure of potato tuber adp-glucose2 pyrophosphorylase in complex with atp
52	c2rijA_		Alignment	not modelled	98.8	18	PDB header: transferase Chain: A; PDB Molecule: putative 2,3,4,5-tetrahydropyridine-2-carboxylate n- PDBTitle: crystal structure of a putative 2,3,4,5-tetrahydropyridine-2-2 carboxylate n-succinyltransferase (cj1605c, dapd) from campylobacter3 jejuni at 1.90 a resolution
53	c1fwyA_		Alignment	not modelled	98.8	21	PDB header: transferase Chain: A; PDB Molecule: udp-n-acetylglucosamine pyrophosphorylase; PDBTitle: crystal structure of n-acetylglucosamine 1-phosphate2 uridyltransferase bound to udp-glcnac
54	d1fxja1		Alignment	not modelled	98.6	20	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
55	c3brkX_		Alignment	not modelled	98.5	21	PDB header: transferase Chain: X; PDB Molecule: glucose-1-phosphate adenylyltransferase; PDBTitle: crystal structure of adp-glucose pyrophosphorylase from2 agrobacterium tumefaciens
56	d2icya1		Alignment	not modelled	28.9	15	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
57	c3gueB_		Alignment	not modelled	18.8	20	PDB header: transferase Chain: B; PDB Molecule: utp-glucose-1-phosphate uridylyltransferase 2; PDBTitle: crystal structure of udp-glucose phosphorylase from trypanosoma2 brucei, (tb10.389.0330)
58	d1civa2		Alignment	not modelled	16.4	8	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
59	c1mldA_		Alignment	not modelled	15.0	11	PDB header: oxidoreductase(nad(a)-choh(d)) Chain: A; PDB Molecule: malate dehydrogenase; PDBTitle: refined structure of mitochondrial malate dehydrogenase2 from porcine heart and the consensus structure for3 dicarboxylic acid oxidoreductases
60	d7mdha2		Alignment	not modelled	10.4	7	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
61	c3u1dA_		Alignment	not modelled	10.2	14	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: the structure of a protein with a gnt superfamily winged-helix-turn-2 helix domain from halomicrobium mukohataei.
62	d1mlda2		Alignment	not modelled	8.4	15	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
63	d2gvia1		Alignment	not modelled	6.1	14	Fold: FwdE/GAPDH domain-like Superfamily: FwdE-like Family: FwdE-like
64	d1b8pa2		Alignment	not modelled	5.6	8	Fold: LDH C-terminal domain-like Superfamily: LDH C-terminal domain-like Family: Lactate & malate dehydrogenases, C-terminal domain
65	c2dfdD_		Alignment	not modelled	5.3	11	PDB header: oxidoreductase Chain: D; PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of human malate dehydrogenase type 2