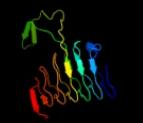
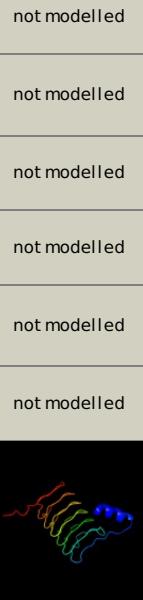
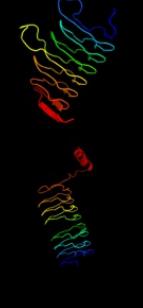
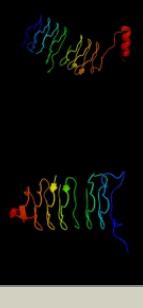
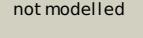


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P37750
Date	Thu Jan 5 11:57:27 GMT 2012
Unique Job ID	4c2aaaf20c7ace825

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1krta_	Alignment		100.0	31	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
2	c3ectA_	Alignment		100.0	28	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
3	c3fttA_	Alignment		100.0	27	PDB header: transferase Chain: A: PDB Molecule: putative acetyltransferase sacol2570; PDBTitle: crystal structure of the galactoside o-acetyltransferase2 from staphylococcus aureus
4	c3srtB_	Alignment		100.0	31	PDB header: transferase Chain: B: PDB Molecule: maltose o-acetyltransferase; PDBTitle: the crystal structure of a maltose o-acetyltransferase from2 clostridium difficile 630
5	c2ic7A_	Alignment		100.0	28	PDB header: transferase Chain: A: PDB Molecule: maltose transacetylase; PDBTitle: crystal structure of maltose transacetylase from2 geobacillus kaustophilus
6	c3jqyB_	Alignment		100.0	23	PDB header: transferase Chain: B: PDB Molecule: polysialic acid o-acetyltransferase; PDBTitle: crystal strucure of the polysia specific acetyltransferase neuo
7	d1ocxa_	Alignment		100.0	30	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
8	d1mr7a_	Alignment		100.0	26	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
9	c3i3aC_	Alignment		100.0	18	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
10	c2wlgA_	Alignment		100.0	27	PDB header: transferase Chain: A: PDB Molecule: polysialic acid o-acetyltransferase; PDBTitle: crystallographic analysis of the polysialic acid o-2 acetyltransferase oatwy
11	c3eevC_	Alignment		100.0	17	PDB header: transferase Chain: C: PDB Molecule: chloramphenicol acetyltransferase; PDBTitle: crystal structure of chloramphenicol acetyltransferase vca0300 from2 vibrio cholerae o1 biovar eltor

12	c3r0sA	Alignment		100.0	16	PDB header: transferase Chain: A: PDB Molecule: acyl-[acyl-carrier-protein]-udp-n-acetylglucosamine o- PDBTitle: udp-n-acetylglucosamine acyltransferase from campylobacter jejuni
13	d2jf2a1	Alignment		100.0	22	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase
14	d1j2za	Alignment		100.0	16	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase
15	c2iu9C	Alignment		100.0	20	PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine PDBTitle: chlamydia trachomatis lpxd with 100mm udpglcnaac (complex ii)
16	d1xata	Alignment		100.0	18	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
17	c3cj8B	Alignment		100.0	28	PDB header: transferase Chain: B: PDB Molecule: 2,3,4,5-tetrahydropyridine-2-carboxylate n- PDBTitle: crystal structure of 2,3,4,5-tetrahydropyridine-2-carboxylate n-2 succinyltransferase from enterococcus faecalis v583
18	c3pmoA	Alignment		100.0	18	PDB header: transferase Chain: A: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine n-acetyltransferase; PDBTitle: the structure of lpxd from pseudomonas aeruginosa at 1.3 a resolution
19	c3eh0C	Alignment		99.9	18	PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine n- PDBTitle: crystal structure of lpxd from escherichia coli
20	c3mghD	Alignment		99.9	23	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
21	d1v3wa	Alignment	not modelled	99.9	22	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like
22	c3ixcA	Alignment	not modelled	99.9	16	PDB header: transferase Chain: A: PDB Molecule: hexapeptide transferase family protein; PDBTitle: crystal structure of hexapeptide transferase family protein from2 anaplasma phagocytophylum
23	d1g97a1	Alignment	not modelled	99.9	18	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
24	d1t3da	Alignment	not modelled	99.9	22	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase
25	c1t3dB	Alignment	not modelled	99.9	22	PDB header: transferase Chain: B: PDB Molecule: serine acetyltransferase; PDBTitle: crystal structure of serine acetyltransferase from e.coli at 2.2a
26	d2oi6a1	Alignment	not modelled	99.9	19	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
27	d3bswa1	Alignment		99.9	21	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: PglD-like
28	c3r3rA	Alignment	not modelled	99.9	22	PDB header: transferase Chain: A: PDB Molecule: ferripyochelin binding protein; PDBTitle: structure of the yrda ferripyochelin binding protein from

						salmonella2 enterica
29	c3fsbB_	Alignment	not modelled	99.9	25	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
30	d1ssqa_	Alignment	not modelled	99.9	21	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase
31	c3r1wA_	Alignment	not modelled	99.9	19	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of a carbonic anhydrase from a crude oil degrading2 psychrophilic library
32	c3mc4A_	Alignment	not modelled	99.9	23	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
33	d1xhda_	Alignment	not modelled	99.9	19	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like
34	c1hm8A_	Alignment	not modelled	99.9	19	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	c2v0hA_	Alignment	not modelled	99.9	19	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)
36	c2oi6A_	Alignment	not modelled	99.9	14	PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: e. coli glmu- complex with udp-glcnac, coa and glcn-1-po4
37	c3q1xA_	Alignment	not modelled	99.9	20	PDB header: transferase Chain: A: PDB Molecule: serine acetyltransferase; PDBTitle: crystal structure of entamoeba histolytica serine acetyltransferase 12 in complex with l-serine
38	c3eg4A_	Alignment	not modelled	99.9	17	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
39	d3tdta_	Alignment	not modelled	99.8	20	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Tetrahydriodipicolinate-N-succinyltransferase, THDP-succinyltransferase, DapD
40	c3f1xA_	Alignment	not modelled	99.8	23	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.
41	c3kwda_	Alignment	not modelled	99.8	19	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
42	c3c8vA_	Alignment	not modelled	99.8	15	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
43	c1qreA_	Alignment	not modelled	99.8	16	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 thermophila
44	d1qrea_	Alignment	not modelled	99.8	16	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like
45	c3fsyC_	Alignment	not modelled	99.7	24	PDB header: transferase Chain: C: PDB Molecule: tetrahydriodipicolinate n-succinyltransferase; PDBTitle: structure of tetrahydriodipicolinate n-succinyltransferase2 (rv1201c;dapd) in complex with succinyl-coa from mycobacterium3 tuberculosis
46	c2ggqA_	Alignment	not modelled	99.7	15	PDB header: transferase Chain: A: PDB Molecule: 401aa long hypothetical glucose-1-phosphate PDBTitle: complex of hypothetical glucose-1-phosphate thymidyltransferase from2 sulfolobus tokodaii
47	d2f9ca1	Alignment	not modelled	99.5	13	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: YdcK-like
48	d1yp2a1	Alignment	not modelled	99.4	13	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
49	c2rijA_	Alignment	not modelled	99.3	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
						PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu;

50	c2qkxA		not modelled	99.2	28	PDBTitle: n-acetyl glucosamine 1-phosphate uridyltransferase from mycobacterium2 tuberculosis complex with n-acetyl glucosamine 1-phosphate PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: crystal structure of glmu from mycobacterium tuberculosis, ligand-free2 form
51	c3d98A		not modelled	99.2	24	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	c1yp3C		not modelled	99.1	15	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
53	d1fxja1		not modelled	99.1	25	PDB header: transferase Chain: A: PDB Molecule: udp-n-acetylglucosamine pyrophosphorylase; PDBTitle: crystal structure of n-acetylglucosamine 1-phosphate2 uridylyltransferase bound to udp-glcNAc
54	c1fwyA		not modelled	99.0	31	PDB header: transferase Chain: X: PDB Molecule: glucose-1-phosphate adenylyltransferase; PDBTitle: crystal structure of adp-glucose pyrophosphorylase from agrobacterium tumefaciens
55	c3brkX		not modelled	98.9	14	PDB header: transferase Chain: E: PDB Molecule: histone-lysine n-methyltransferase, h3 lysine-4 PDBTitle: crystal structure of a ternary complex of the2 methyltransferase set9 (also known as set7/9) with a p53 peptide and sah
56	c1xqhE		not modelled	26.5	13	PDB header: transferase Chain: B: PDB Molecule: histone h3 lysine 4 specific methyltransferase; PDBTitle: crystal structure of the histone methyltransferase set7/9
57	c1h3iB		not modelled	19.7	13	Fold: N domain of copper amine oxidase-like Superfamily: Frataxin/Nqo15-like Family: Frataxin-like
58	d1ew4a		not modelled	9.4	10	PDB header: lyase Chain: B: PDB Molecule: aspartate 1-decarboxylase; PDBTitle: the crystal structure of aspartate alpha-decarboxylase from campylobacter jejuni subsp. jejuni nctc 11168
59	c3plxB		not modelled	9.1	20	Fold: beta-clip Superfamily: SET domain Family: Viral histone H3 Lysine 27 Methyltransferase
60	d2g46a1		not modelled	8.5	13	PDB header: allergen Chain: A: PDB Molecule: allergen bla g 4; PDBTitle: crystal structure of major allergens, bla g 4 from2 cockroaches
61	c3ebkA		not modelled	6.6	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: x-ray crystal structure of protein sp_0782 (7-79) from streptococcus2 pneumoniae. northeast structural genomics consortium target spr104
62	c3obhA		not modelled	5.7	33	