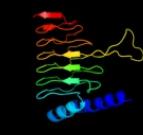
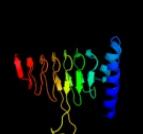
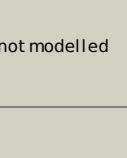


Phyre²

| | |
|---------------|-----------------------------|
| Email | i.a.kelley@imperial.ac.uk |
| Description | P0ACD2 |
| Date | Thu Jan 5 11:17:56 GMT 2012 |
| Unique Job ID | 62069c43e8cc25ac |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|----------|--------------------|---|------------|--------|--|
| 1 | d1krra_ | Alignment |  | 100.0 | 27 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like |
| 2 | c3ectA_ | Alignment |  | 100.0 | 26 | 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 | c3srtB_ | Alignment |  | 100.0 | 26 | PDB header: transferase Chain: B; PDB Molecule: maltose o-acetyltransferase; PDBTitle: the crystal structure of a maltose o-acetyltransferase from2 clostridium difficile 630 |
| 4 | 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 |
| 5 | c2ic7A_ | Alignment |  | 100.0 | 24 | PDB header: transferase Chain: A; PDB Molecule: maltose transacetylase; PDBTitle: crystal structure of maltose transacetylase from2 geobacillus kaustophilus |
| 6 | d1ocxa_ | Alignment |  | 100.0 | 25 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like |
| 7 | d1t3da_ | Alignment |  | 100.0 | 16 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase |
| 8 | c1t3dB_ | Alignment |  | 100.0 | 16 | PDB header: transferase Chain: B; PDB Molecule: serine acetyltransferase; PDBTitle: crystal structure of serine acetyltransferase from e.coli at 2.2a |
| 9 | c3jqyB_ | Alignment |  | 100.0 | 28 | PDB header: transferase Chain: B; PDB Molecule: polysialic acid o-acetyltransferase; PDBTitle: crystal strucure of the polysia specific acetyltransferase neuo |
| 10 | d1ssqa_ | Alignment |  | 100.0 | 14 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase |
| 11 | d1mr7a_ | Alignment |  | 100.0 | 24 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like |

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|----|-------------------------|-----------|---|-------|----|---|
| 12 | c3mc4A | Alignment |  | 100.0 | 17 | 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 |
| 13 | c3eevC | Alignment |  | 99.9 | 20 | PDB header: transferase Chain: C: PDB Molecule: chloramphenicol acetyltransferase; PDBTitle: crystal structure of chloramphenicol acetyltransferase vca0300 from2 vibrio cholerae o1 biovar eltor |
| 14 | c2wlga | Alignment |  | 99.9 | 22 | PDB header: transferase Chain: A: PDB Molecule: polysialic acid o-acetyltransferase; PDBTitle: crystallographic analysis of the polysialic acid o-2 acetyltransferase oatwy |
| 15 | c3i3aC | Alignment |  | 99.9 | 22 | 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 |
| 16 | c3r0sA | Alignment |  | 99.9 | 25 | PDB header: transferase Chain: A: PDB Molecule: acyl-[acyl-carrier-protein]-udp-n-acetylglucosamine o- PDBTitle: udp-n-acetylglucosamine acyltransferase from campylobacter jejuni |
| 17 | d1xata | Alignment |  | 99.9 | 20 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like |
| 18 | d1j2za | Alignment |  | 99.9 | 23 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase |
| 19 | d2jf2a1 | Alignment |  | 99.9 | 24 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase |
| 20 | c2iu9C | Alignment |  | 99.9 | 21 | PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine PDBTitle: chlamydia trachomatis lpxd with 100mm udpglcnac (complex ii) |
| 21 | c3cj8B | Alignment | not modelled | 99.9 | 30 | 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 |
| 22 | c3mghD | Alignment | not modelled | 99.9 | 22 | 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 |
| 23 | c3ixcA | Alignment | not modelled | 99.9 | 18 | PDB header: transferase Chain: A: PDB Molecule: hexapeptide transferase family protein; PDBTitle: crystal structure of hexapeptide transferase family protein from2 anaplasma phagocytophilum |
| 24 | d3bswa1 | Alignment | not modelled | 99.9 | 20 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: PglD-like |
| 25 | c3q1xA | Alignment | not modelled | 99.9 | 13 | PDB header: transferase Chain: A: PDB Molecule: serine acetyltransferase; PDBTitle: crystal structure of entamoeba histolytica serine acetyltransferase 12 in complex with l-serine |
| 26 | c3pmoA | Alignment | not modelled | 99.9 | 30 | 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 |
| 27 | d1g97a1 | Alignment | not modelled | 99.9 | 19 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like |

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|----|-------------------------|-----------|--------------|------|----|---|
| 28 | c3f1xA | Alignment | not modelled | 99.9 | 17 | 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. |
| 29 | c3eh0C | Alignment | not modelled | 99.9 | 22 | PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine n- PDBTitle: crystal structure of lpxd from escherichia coli |
| 30 | c3fsbB | Alignment | not modelled | 99.9 | 26 | 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 |
| 31 | d2oi6a1 | Alignment | not modelled | 99.9 | 28 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like |
| 32 | d1v3wa | Alignment | not modelled | 99.9 | 19 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like |
| 33 | c1hm8A | Alignment | not modelled | 99.9 | 20 | PDB header: transferase Chain: A: PDB Molecule: udp-n-acetylglucosamine-1-phosphate uridylyltransferase; PDBTitle: crystal structure of s.pneumoniae n-acetylglucosamine-1-phosphate2 uridylyltransferase, glmu, bound to acetyl coenzyme a |
| 34 | c3r3rA | Alignment | not modelled | 99.9 | 24 | PDB header: transferase Chain: A: PDB Molecule: ferripyochelin binding protein; PDBTitle: structure of the yrda ferripyochelin binding protein from salmonella2 enterica |
| 35 | c3r1wA | Alignment | not modelled | 99.8 | 24 | PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of a carbonic anhydrase from a crude oil degrading2 psychrophilic library |
| 36 | c2v0hA | Alignment | not modelled | 99.8 | 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 uridylyltransferase (glmu) |
| 37 | d1xhda | Alignment | not modelled | 99.8 | 22 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like |
| 38 | c3eg4A | Alignment | not modelled | 99.8 | 19 | 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 | c2oi6A | Alignment | not modelled | 99.8 | 23 | PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: e. coli glmu- complex with udp-glcnac, coa and glcn-1-po4 |
| 40 | d3tdta | Alignment | not modelled | 99.8 | 19 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Tetrahydrodipicolinate-N-succinyltransferase, THDP-succinyltransferase, DapD |
| 41 | c3fsyC | Alignment | not modelled | 99.7 | 21 | PDB header: transferase Chain: C: PDB Molecule: tetrahydrodipicolinate n-succinyltransferase; PDBTitle: structure of tetrahydrodipicolinate n-succinyltransferase2 (rv1201c;dapd) in complex with succinyl-coa from mycobacterium3 tuberculosis |
| 42 | c3c8vA | Alignment | not modelled | 99.7 | 18 | 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 | c3kwda | Alignment | not modelled | 99.7 | 15 | 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 |
| 44 | d1qrea | Alignment | not modelled | 99.7 | 20 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: gamma-carbonic anhydrase-like |
| 45 | c1qreA | Alignment | not modelled | 99.7 | 20 | 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 from methanosaerina thermophila |
| 46 | c2ggqA | Alignment | not modelled | 99.6 | 15 | PDB header: transferase Chain: A: PDB Molecule: 401aa long hypothetical glucose-1-phosphate PDBTitle: complex of hypothetical glucose-1-phosphate thymidyllyltransferase from2 sulfolobus tokodaii |
| 47 | d2f9ca1 | Alignment | not modelled | 99.3 | 14 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: YdcK-like |
| 48 | d1yp2a1 | Alignment | not modelled | 99.3 | 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 | 17 | 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 |
| 50 | c3d98A | Alignment | not modelled | 99.2 | 28 | PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; |

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|----|-------------------------|-----------|--------------|------|----|---|
| 50 | c2qym | Alignment | not modelled | 99.2 | 20 | PDBTitle: crystal structure of glmu from mycobacterium tuberculosis, ligand-free2 form PDB header: transferase Chain: A: PDB Molecule: bifunctional protein glmu; PDBTitle: n-acetyl glucosamine 1-phosphate uridylyltransferase from mycobacterium2 tuberculosis complex with n-acetyl glucosamine 1-phosphate |
| 51 | c2qkxA | Alignment | not modelled | 99.2 | 27 | Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like |
| 52 | d1fxja1 | Alignment | not modelled | 99.1 | 22 | 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 |
| 53 | c1yp3C | Alignment | not modelled | 98.9 | 13 | 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 | Alignment | not modelled | 98.7 | 22 | PDB header: transferase Chain: X: PDB Molecule: glucose-1-phosphate adenylyltransferase; PDBTitle: crystal structure of adp-glucose pyrophosphorylase from2 agrobacterium tumefaciens |
| 55 | c3brkX | Alignment | not modelled | 98.6 | 14 | Fold: SH3-like barrel Superfamily: DNA-binding domain of retroviral integrase Family: DNA-binding domain of retroviral integrase |
| 56 | d1ihwa | Alignment | not modelled | 15.0 | 23 | Fold: SH3-like barrel Superfamily: DNA-binding domain of retroviral integrase Family: DNA-binding domain of retroviral integrase |
| 57 | d1ex4a1 | Alignment | not modelled | 14.6 | 23 | Fold: Double-stranded beta-helix Superfamily: Calcium ATPase, transduction domain A Family: Calcium ATPase, transduction domain A |
| 58 | d1wpga1 | Alignment | not modelled | 8.9 | 13 | Fold: SH3-like barrel Superfamily: DNA-binding domain of retroviral integrase Family: DNA-binding domain of retroviral integrase |
| 59 | d1c6vx | Alignment | not modelled | 7.7 | 19 | PDB header: dna binding protein Chain: X: PDB Molecule: protein (siu89134); PDBTitle: siv integrase (catalytic domain + dna biding domain2 comprising residues 50-293) mutant with phe 185 replaced3 by his (f185h) |
| 60 | c1c6vX | Alignment | not modelled | 7.7 | 19 | Fold: Profilin-like Superfamily: GAF domain-like Family: Phytochrome-specific domain |
| 61 | d3c2wa2 | Alignment | not modelled | 6.8 | 18 | Fold: Profilin-like Superfamily: GAF domain-like Family: Phytochrome-specific domain |
| 62 | d2veaa2 | Alignment | not modelled | 6.1 | 18 | Fold: Profilin-like Superfamily: GAF domain-like Family: Phytochrome-specific domain |