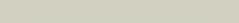
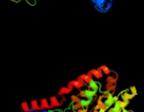
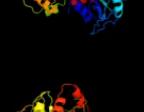
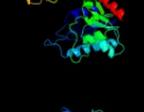


# Phyre2

|               |                             |
|---------------|-----------------------------|
| Email         | l.a.kelley@imperial.ac.uk   |
| Description   | P27828                      |
| Date          | Thu Jan 5 11:44:04 GMT 2012 |
| Unique Job ID | fbd6eff867298048            |

Detailed template information

| #  | Template                | Alignment Coverage                                                                            | 3D Model                                                                            | Confidence | % i.d. | Template Information                                                                                                                                                                                                                                                                                  |
|----|-------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | <a href="#">d1f6da_</a> |  Alignment   |    | 100.0      | 97     | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDP-N-acetylglucosamine 2-epimerase                                                                                                               |
| 2  | <a href="#">c3dzcA_</a> |  Alignment   |    | 100.0      | 67     | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> udp-n-acetylglucosamine 2-epimerase;<br><b>PDBTitle:</b> 2.35 angstrom resolution structure of wecb (vc0917), a udp-n-2 acetylglucosamine 2-epimerase from vibrio cholerae.                                                     |
| 3  | <a href="#">d1v4va_</a> |  Alignment   |    | 100.0      | 42     | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDP-N-acetylglucosamine 2-epimerase                                                                                                               |
| 4  | <a href="#">c3ot5D_</a> |  Alignment   |    | 100.0      | 50     | <b>PDB header:</b> isomerase<br><b>Chain:</b> D: <b>PDB Molecule:</b> udp-n-acetylglucosamine 2-epimerase;<br><b>PDBTitle:</b> 2.2 angstrom resolution crystal structure of putative udp-n-2 acetylglucosamine 2-epimerase from listeria monocytogenes                                                |
| 5  | <a href="#">d1o6ca_</a> |  Alignment |  | 100.0      | 51     | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDP-N-acetylglucosamine 2-epimerase                                                                                                               |
| 6  | <a href="#">c3c4vB_</a> |  Alignment |  | 100.0      | 14     | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> predicted glycosyltransferases;<br><b>PDBTitle:</b> structure of the retaining glycosyltransferase msha:the2 first step in mycothiol biosynthesis. organism:3 corynebacterium glutamicum : complex with udp and 1l-ins-1-4 p. |
| 7  | <a href="#">c3okaA_</a> |  Alignment |  | 100.0      | 15     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> gdp-mannose-dependent alpha-(1-6)-phosphatidylinositol<br><b>PDBTitle:</b> crystal structure of corynebacterium glutamicum pimb' in complex with2 gdp-man (triclinic crystal form)                                            |
| 8  | <a href="#">c3s29C_</a> |  Alignment |  | 100.0      | 12     | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> sucrose synthase 1;<br><b>PDBTitle:</b> the crystal structure of sucrose synthase-1 from arabidopsis thaliana2 and its functional implications.                                                                               |
| 9  | <a href="#">c2jmh_</a>  |  Alignment |  | 100.0      | 14     | <b>PDB header:</b> transferase<br><b>Chain:</b> H: <b>PDB Molecule:</b> glycosyl transferase, group 1 family protein;<br><b>PDBTitle:</b> crystal structure of a family gt4 glycosyltransferase from2 bacillus anthracis orf ba1558.                                                                  |
| 10 | <a href="#">c2r60A_</a> |  Alignment |  | 100.0      | 14     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glycosyl transferase, group 1;<br><b>PDBTitle:</b> structure of apo sucrose phosphate synthase (sps) of2 halothermothrix oreni i                                                                                              |
| 11 | <a href="#">c2gejA_</a> |  Alignment |  | 100.0      | 16     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphatidylinositol mannosyltransferase (pima);<br><b>PDBTitle:</b> crystal structure of phosphatidylinositol mannosyltransferase (pima)2 from mycobacterium smegmatis in complex with gdp-man                               |

|    |                         |           |                                                                                     |       |    |                                                                                                                                                                                                                                                                                         |
|----|-------------------------|-----------|-------------------------------------------------------------------------------------|-------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | <a href="#">c2bisa1</a> | Alignment |    | 100.0 | 17 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Glycosyl transferases group 1                                                                                                       |
| 13 | <a href="#">c3oy2A</a>  | Alignment |    | 100.0 | 13 | <b>PDB header:</b> viral protein,transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glycosyltransferase b736I;<br><b>PDBTitle:</b> crystal structure of a putative glycosyltransferase from paramecium2 bursaria chlorella virus ny2a                                                 |
| 14 | <a href="#">c2xmpB</a>  | Alignment |    | 100.0 | 15 | <b>PDB header:</b> sugar binding protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> trehalose-synthase tret;<br><b>PDBTitle:</b> crystal structure of trehalose synthase tret mutant e326a2 from p.horishiki in complex with udp                                                          |
| 15 | <a href="#">c2qzsA</a>  | Alignment |    | 100.0 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glycogen synthase;<br><b>PDBTitle:</b> crystal structure of wild-type e.coli gs in complex with adp2 and glucose(wtgsb)                                                                                         |
| 16 | <a href="#">d2iw1a1</a> | Alignment |    | 100.0 | 13 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Glycosyl transferases group 1                                                                                                       |
| 17 | <a href="#">c2x6rA</a>  | Alignment |    | 100.0 | 16 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> trehalose-synthase tret;<br><b>PDBTitle:</b> crystal structure of trehalose synthase tret from p.2 horikoshi produced by soaking in trehalose                                                                     |
| 18 | <a href="#">c1uquB</a>  | Alignment |   | 100.0 | 12 | <b>PDB header:</b> synthase<br><b>Chain:</b> B: <b>PDB Molecule:</b> alpha, alpha-trehalose-phosphate synthase;<br><b>PDBTitle:</b> trehalose-6-phosphate from e. coli bound with udp-glucose.                                                                                          |
| 19 | <a href="#">d1rzua</a>  | Alignment |  | 100.0 | 16 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Glycosyl transferases group 1                                                                                                       |
| 20 | <a href="#">d1uqta</a>  | Alignment |  | 99.9  | 14 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Trehalose-6-phosphate synthase, OtsA                                                                                                |
| 21 | <a href="#">c2x0dA</a>  | Alignment | not modelled                                                                        | 99.9  | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> wsaf;<br><b>PDBTitle:</b> apo structure of wsaf                                                                                                                                                                 |
| 22 | <a href="#">c3iaaB</a>  | Alignment | not modelled                                                                        | 99.9  | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> calg2;<br><b>PDBTitle:</b> crystal structure of calg2, calicheamicin glycosyltransferase, tdp2 bound form                                                                                                       |
| 23 | <a href="#">c3othB</a>  | Alignment | not modelled                                                                        | 99.9  | 17 | <b>PDB header:</b> transferase/antibiotic<br><b>Chain:</b> B: <b>PDB Molecule:</b> calg1;<br><b>PDBTitle:</b> crystal structure of calg1, calicheamicin glycosyltransferase, tdp2 and calicheamicin alpha3i bound form                                                                  |
| 24 | <a href="#">d1f0ka</a>  | Alignment | not modelled                                                                        | 99.9  | 13 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Peptidoglycan biosynthesis glycosyltransferase MurG                                                                                 |
| 25 | <a href="#">c2p6pB</a>  | Alignment | not modelled                                                                        | 99.9  | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> glycosyl transferase;<br><b>PDBTitle:</b> x-ray crystal structure of c-c bond-forming dtdp-d-olivose-transferase2 urdgt2                                                                                        |
| 26 | <a href="#">c3ia7A</a>  | Alignment | not modelled                                                                        | 99.9  | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> calg4;<br><b>PDBTitle:</b> crystal structure of calg4, the calicheamicin glycosyltransferase                                                                                                                    |
| 27 | <a href="#">c2iyfA</a>  | Alignment | not modelled                                                                        | 99.9  | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> oleandomycin glycosyltransferase;<br><b>PDBTitle:</b> the crystal structure of macrolide glycosyltransferases: a2 blueprint for antibiotic engineering                                                          |
| 28 | <a href="#">c3rhzB</a>  | Alignment | not modelled                                                                        | 99.9  | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> nucleotide sugar synthetase-like protein;<br><b>PDBTitle:</b> structure and functional analysis of a new subfamily of 2 glycosyltransferases required for glycosylation of serine-rich3 streptococcal adhesions |

|    |                         |           |              |      |    |                                                                                                                                                                                                                                                                 |
|----|-------------------------|-----------|--------------|------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29 | <a href="#">c2xcuC</a>  | Alignment | not modelled | 99.9 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> 3-deoxy-d-manno-2-octulosonic acid transferase;<br><b>PDBTitle:</b> membrane-embedded monofunctional glycosyltransferase waaa of aquifex2 aeolicus, complex with cmp                    |
| 30 | <a href="#">c2iv3B</a>  | Alignment | not modelled | 99.9 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> glycosyltransferase;<br><b>PDBTitle:</b> crystal structure of avigt4, a glycosyltransferase involved2 in avilamycin a biosynthesis                                                      |
| 31 | <a href="#">c2q6vA</a>  | Alignment | not modelled | 99.9 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glucuronosyltransferase gumk;<br><b>PDBTitle:</b> crystal structure of gumk in complex with udp                                                                                         |
| 32 | <a href="#">c2iyaB</a>  | Alignment | not modelled | 99.9 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> oleandomycin glycosyltransferase;<br><b>PDBTitle:</b> the crystal structure of macrolide glycosyltransferases: a2 blueprint for antibiotic engineering                                  |
| 33 | <a href="#">c3o3cD</a>  | Alignment | not modelled | 99.9 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> glycogen [starch] synthase isoform 2;<br><b>PDBTitle:</b> glycogen synthase basal state udp complex                                                                                     |
| 34 | <a href="#">c3nb0A</a>  | Alignment | not modelled | 99.9 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glycogen [starch] synthase isoform 2;<br><b>PDBTitle:</b> glucose-6-phosphate activated form of yeast glycogen synthase                                                                 |
| 35 | <a href="#">c3d0qB</a>  | Alignment | not modelled | 99.9 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> protein calg3;<br><b>PDBTitle:</b> crystal structure of calg3 from micromonospora echinospora determined2 in space group i222                                                           |
| 36 | <a href="#">d1pn3a</a>  | Alignment | not modelled | 99.8 | 13 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Gtf glycosyltransferase                                                                                     |
| 37 | <a href="#">d1iira</a>  | Alignment | not modelled | 99.8 | 12 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Gtf glycosyltransferase                                                                                     |
| 38 | <a href="#">d1rrva</a>  | Alignment | not modelled | 99.8 | 14 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Gtf glycosyltransferase                                                                                     |
| 39 | <a href="#">d2f9fa1</a> | Alignment | not modelled | 99.8 | 14 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Glycosyl transferases group 1                                                                               |
| 40 | <a href="#">c2vsnB</a>  | Alignment | not modelled | 99.7 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> xcogt;<br><b>PDBTitle:</b> structure and topological arrangement of an o-glcna2 transferase homolog: insight into molecular control of3 intracellular glycosylation                     |
| 41 | <a href="#">c3qhpB</a>  | Alignment | not modelled | 99.7 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> type 1 capsular polysaccharide biosynthesis protein j<br><b>PDBTitle:</b> crystal structure of the catalytic domain of cholesterol-alpha-2 glucosyltransferase from helicobacter pylori |
| 42 | <a href="#">d2acva1</a> | Alignment | not modelled | 99.6 | 10 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDPGT-like                                                                                                  |
| 43 | <a href="#">d2bfwa1</a> | Alignment | not modelled | 99.6 | 12 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Glycosyl transferases group 1                                                                               |
| 44 | <a href="#">c3hbjA</a>  | Alignment | not modelled | 99.6 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> flavonoid 3-o-glucosyltransferase;<br><b>PDBTitle:</b> structure of ugt78g1 complexed with udp                                                                                          |
| 45 | <a href="#">c3pe3D</a>  | Alignment | not modelled | 99.6 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> udp-n-acetylglucosamine--peptide n-<br><b>PDBTitle:</b> structure of human o-glcna2 transferase and its complex with a peptide2 substrate                                               |
| 46 | <a href="#">d2pq6a1</a> | Alignment | not modelled | 99.3 | 9  | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDPGT-like                                                                                                  |
| 47 | <a href="#">d2vcha1</a> | Alignment | not modelled | 99.3 | 10 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDPGT-like                                                                                                  |
| 48 | <a href="#">d2c1xa1</a> | Alignment | not modelled | 99.3 | 11 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> UDPGT-like                                                                                                  |
| 49 | <a href="#">c3hbmA</a>  | Alignment | not modelled | 99.1 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> udp-sugar hydrolase;<br><b>PDBTitle:</b> crystal structure of pseg from campylobacter jejuni                                                                                              |
| 50 | <a href="#">c3l7mC</a>  | Alignment | not modelled | 98.8 | 15 | <b>PDB header:</b> structural protein<br><b>Chain:</b> C: <b>PDB Molecule:</b> teichoic acid biosynthesis protein f;<br><b>PDBTitle:</b> structure of the wall teichoic acid polymerase tagf, h548a                                                             |
| 51 | <a href="#">c3q3hA</a>  | Alignment | not modelled | 98.8 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> hmw1c-like glycosyltransferase;<br><b>PDBTitle:</b> crystal structure of the actinobacillus pleuropneumoniae hmw1c2 glycosyltransferase in complex with udp-glc                         |
| 52 | <a href="#">d1pswa</a>  | Alignment | not modelled | 98.7 | 15 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> ADP-heptose LPS heptosyltransferase II                                                                      |
| 53 | <a href="#">c2h1fB</a>  | Alignment | not modelled | 98.6 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> lipopolysaccharide heptosyltransferase-1;<br><b>PDBTitle:</b> e. coli heptosyltransferase waac with adp                                                                                 |
| 54 | <a href="#">c2o6lA</a>  | Alignment | not modelled | 98.5 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> udp-glucuronosyltransferase 2b7;<br><b>PDBTitle:</b> crystal structure of the udp-glucuronic acid binding domain2 of the human drug metabolizing udp-                                   |

|    |                         |           |              |      |    |                                                                                                                                                                                                                                                                                                    |
|----|-------------------------|-----------|--------------|------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                         |           |              |      |    | glucuronosyltransferase3 2b7<br><b>PDB header:</b> transferase                                                                                                                                                                                                                                     |
| 55 | <a href="#">c3tovB_</a> | Alignment | not modelled | 98.2 | 14 | <b>Chain:</b> B: <b>PDB Molecule:</b> glycosyl transferase family 9;<br><b>PDBTitle:</b> the crystal structure of the glycosyl transferase family 9 from2 veillonella parvula dsm 2008                                                                                                             |
| 56 | <a href="#">c2jzcA_</a> | Alignment | not modelled | 96.6 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> udp-n-acetylglucosamine transferase subunit<br><b>PDBTitle:</b> nmr solution structure of alg13: the sugar donor subunit of2 a yeast n-acetylglucosamine transferase. northeast3 structural genomics consortium target yg1 |
| 57 | <a href="#">c3ddsB_</a> | Alignment | not modelled | 96.3 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> glycogen phosphorylase, liver form;<br><b>PDBTitle:</b> crystal structure of glycogen phosphorylase complexed with an2 anthranilimide based inhibitor gsk261                                                               |
| 58 | <a href="#">d2gj4a1</a> | Alignment | not modelled | 96.0 | 12 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Oligosaccharide phosphorylase                                                                                                                  |
| 59 | <a href="#">d2atia1</a> | Alignment | not modelled | 95.9 | 13 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Oligosaccharide phosphorylase                                                                                                                  |
| 60 | <a href="#">c2ixdB_</a> | Alignment | not modelled | 94.9 | 18 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> lmbE-related protein;<br><b>PDBTitle:</b> crystal structure of the putative deacetylase bc1534 from2 bacillus cereus                                                                                                         |
| 61 | <a href="#">c2c4mA_</a> | Alignment | not modelled | 94.8 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glycogen phosphorylase;<br><b>PDBTitle:</b> starch phosphorylase: structural studies explain oxyanion-2 dependent kinetic stability and regulatory control.                                                                |
| 62 | <a href="#">d1uana_</a> | Alignment | not modelled | 94.4 | 13 | <b>Fold:</b> LmbE-like<br><b>Superfamily:</b> LmbE-like<br><b>Family:</b> LmbE-like                                                                                                                                                                                                                |
| 63 | <a href="#">c3kcgA_</a> | Alignment | not modelled | 94.1 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase;<br><b>PDBTitle:</b> crystal structure of phosphoribosylglycinamide formyltransferase from2 anaplasma phagocytophilum                                                          |
| 64 | <a href="#">d1l5wa_</a> | Alignment | not modelled | 93.3 | 15 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Oligosaccharide phosphorylase                                                                                                                  |
| 65 | <a href="#">c1s3iA_</a> | Alignment | not modelled | 93.0 | 10 | <b>PDB header:</b> hydrolase, oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 10-formyltetrahydrofolate dehydrogenase;<br><b>PDBTitle:</b> crystal structure of the n terminal hydrolase domain of 10-2 formyltetrahydrofolate dehydrogenase                                               |
| 66 | <a href="#">d1s3ia2</a> | Alignment | not modelled | 92.6 | 9  | <b>Fold:</b> Formyltransferase<br><b>Superfamily:</b> Formyltransferase<br><b>Family:</b> Formyltransferase                                                                                                                                                                                        |
| 67 | <a href="#">c3tqrA_</a> | Alignment | not modelled | 92.5 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase;<br><b>PDBTitle:</b> structure of the phosphoribosylglycinamide formyltransferase (purn) in2 complex with ches from coxiella burnetii                                          |
| 68 | <a href="#">d1j9ja_</a> | Alignment | not modelled | 91.2 | 9  | <b>Fold:</b> SurE-like<br><b>Superfamily:</b> SurE-like<br><b>Family:</b> SurE-like                                                                                                                                                                                                                |
| 69 | <a href="#">c2v4oB_</a> | Alignment | not modelled | 91.0 | 18 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> multifunctional protein sur e;<br><b>PDBTitle:</b> crystal structure of salmonella typhi murium sure at 2.752 angstrom resolution in monoclinic form                                                                         |
| 70 | <a href="#">c2ywrA_</a> | Alignment | not modelled | 90.8 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase;<br><b>PDBTitle:</b> crystal structure of gar transformylase from aquifex2 aeolicus                                                                                            |
| 71 | <a href="#">d1ygpa_</a> | Alignment | not modelled | 90.7 | 12 | <b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase<br><b>Family:</b> Oligosaccharide phosphorylase                                                                                                                  |
| 72 | <a href="#">c3tqqA_</a> | Alignment | not modelled | 90.6 | 19 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna formyltransferase;<br><b>PDBTitle:</b> structure of the methionyl-trna formyltransferase (fmt) from coxiella2 burnetii                                                                                      |
| 73 | <a href="#">c1yrwA_</a> | Alignment | not modelled | 90.0 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein arna;<br><b>PDBTitle:</b> crystal structure of e.coli arna transformylase domain                                                                                                                                   |
| 74 | <a href="#">c2iz6A_</a> | Alignment | not modelled | 90.0 | 18 | <b>PDB header:</b> metal transport<br><b>Chain:</b> A: <b>PDB Molecule:</b> molybdenum cofactor carrier protein;<br><b>PDBTitle:</b> structure of the chlamydomonas reinhardtii moco carrier2 protein                                                                                              |
| 75 | <a href="#">c1fmtA_</a> | Alignment | not modelled | 90.0 | 15 | <b>PDB header:</b> formyltransferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna fmet formyltransferase;<br><b>PDBTitle:</b> methionyl-trnafmet formyltransferase from escherichia coli                                                                                                |
| 76 | <a href="#">c3q0iA_</a> | Alignment | not modelled | 88.5 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna formyltransferase;<br><b>PDBTitle:</b> methionyl-trna formyltransferase from vibrio cholerae                                                                                                                |
| 77 | <a href="#">d1udca_</a> | Alignment | not modelled | 88.3 | 16 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                                 |
| 78 | <a href="#">d1jkxa_</a> | Alignment | not modelled | 88.3 | 11 | <b>Fold:</b> Formyltransferase<br><b>Superfamily:</b> Formyltransferase<br><b>Family:</b> Formyltransferase                                                                                                                                                                                        |
| 79 | <a href="#">c3icpA_</a> | Alignment | not modelled | 88.3 | 26 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> nad-dependent epimerase/dehydratase;                                                                                                                                                                                         |

|     |                         |           |              |      |    |                                                                                                                                                                                                                                                                                                 |
|-----|-------------------------|-----------|--------------|------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                         |           |              |      |    | <b>PDBTitle:</b> crystal structure of udp-galactose 4-epimerase                                                                                                                                                                                                                                 |
| 80  | <a href="#">d1fjha_</a> | Alignment | not modelled | 88.1 | 13 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                              |
| 81  | <a href="#">c1gsoA_</a> | Alignment | not modelled | 88.1 | 17 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein (glycinamide ribonucleotide synthetase);<br><b>PDBTitle:</b> glycinamide ribonucleotide synthetase (gar-syn) from e.2 coli.                                                                                          |
| 82  | <a href="#">c1z7eC_</a> | Alignment | not modelled | 88.0 | 16 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> protein arna;<br><b>PDBTitle:</b> crystal structure of full length arna                                                                                                                                                   |
| 83  | <a href="#">c2pzlB_</a> | Alignment | not modelled | 88.0 | 16 | <b>PDB header:</b> sugar binding protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative nucleotide sugar epimerase/dehydratase;<br><b>PDBTitle:</b> crystal structure of the bordetella bronchiseptica enzyme2 wbmj in complex with nad and udp                                              |
| 84  | <a href="#">c3m2pD_</a> | Alignment | not modelled | 87.6 | 16 | <b>PDB header:</b> isomerase<br><b>Chain:</b> D: <b>PDB Molecule:</b> udp-n-acetylglucosamine 4-epimerase;<br><b>PDBTitle:</b> the crystal structure of udp-n-acetylglucosamine 4-epimerase2 from bacillus cereus                                                                               |
| 85  | <a href="#">c2pk3B_</a> | Alignment | not modelled | 87.4 | 19 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> gdp-6-deoxy-d-lyxo-4-hexulose reductase;<br><b>PDBTitle:</b> crystal structure of a gdp-4-keto-6-deoxy-d-mannose reductase                                                                                           |
| 86  | <a href="#">c3fmfA_</a> | Alignment | not modelled | 87.2 | 33 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dethiobiotin synthetase;<br><b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis dethiobiotin2 synthetase complexed with 7,8 diaminopelargonic acid carbamate                                                    |
| 87  | <a href="#">d1gy8a_</a> | Alignment | not modelled | 86.7 | 25 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                              |
| 88  | <a href="#">c3l77A_</a> | Alignment | not modelled | 86.6 | 25 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> short-chain alcohol dehydrogenase;<br><b>PDBTitle:</b> x-ray structure alcohol dehydrogenase from archaeon thermococcus2 sibiricus complexed with 5-hydroxy-nadp                                                     |
| 89  | <a href="#">d1ydga_</a> | Alignment | not modelled | 86.5 | 18 | <b>Fold:</b> Flavodoxin-like<br><b>Superfamily:</b> Flavoproteins<br><b>Family:</b> WrbA-like                                                                                                                                                                                                   |
| 90  | <a href="#">c2x4gA_</a> | Alignment | not modelled | 86.4 | 13 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> nucleoside-di-phosphate-sugar epimerase;<br><b>PDBTitle:</b> crystal structure of pa4631, a nucleoside-diphosphate-sugar2 epimerase from pseudomonas aeruginosa                                                           |
| 91  | <a href="#">d1wmaa1</a> | Alignment | not modelled | 86.3 | 15 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                              |
| 92  | <a href="#">d2bw0a2</a> | Alignment | not modelled | 86.1 | 13 | <b>Fold:</b> Formyltransferase<br><b>Superfamily:</b> Formyltransferase<br><b>Family:</b> Formyltransferase                                                                                                                                                                                     |
| 93  | <a href="#">d1fmta2</a> | Alignment | not modelled | 86.0 | 13 | <b>Fold:</b> Formyltransferase<br><b>Superfamily:</b> Formyltransferase<br><b>Family:</b> Formyltransferase                                                                                                                                                                                     |
| 94  | <a href="#">c2p5uC_</a> | Alignment | not modelled | 85.9 | 26 | <b>PDB header:</b> isomerase<br><b>Chain:</b> C: <b>PDB Molecule:</b> udp-glucose 4-epimerase;<br><b>PDBTitle:</b> crystal structure of thermus thermophilus hb8 udp-glucose 4-2 epimerase complex with nad                                                                                     |
| 95  | <a href="#">c2xd4A_</a> | Alignment | not modelled | 85.5 | 13 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylamine--glycine ligase;<br><b>PDBTitle:</b> nucleotide-bound structures of bacillus subtilis glycinamide2 ribonucleotide synthetase                                                                             |
| 96  | <a href="#">d2blna2</a> | Alignment | not modelled | 85.0 | 15 | <b>Fold:</b> Formyltransferase<br><b>Superfamily:</b> Formyltransferase<br><b>Family:</b> Formyltransferase                                                                                                                                                                                     |
| 97  | <a href="#">c3lp8A_</a> | Alignment | not modelled | 84.7 | 13 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylamine-glycine ligase;<br><b>PDBTitle:</b> crystal structure of phosphoribosylamine-glycine ligase from2 ehrlichia chaffeensis                                                                                  |
| 98  | <a href="#">d2c5aa1</a> | Alignment | not modelled | 84.5 | 8  | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                              |
| 99  | <a href="#">c1gshA_</a> | Alignment | not modelled | 84.2 | 8  | <b>PDB header:</b> glutathione biosynthesis ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glutathione biosynthetic ligase;<br><b>PDBTitle:</b> structure of escherichia coli glutathione synthetase at ph 7.5                                                                                 |
| 100 | <a href="#">c3dcjA_</a> | Alignment | not modelled | 83.7 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable 5'-phosphoribosylglycinamide<br><b>PDBTitle:</b> crystal structure of glycinamide formyltransferase (purn)2 from mycobacterium tuberculosis in complex with 5-methyl-5,3 6,7,8-tetrahydrofolic acid derivative |
| 101 | <a href="#">c2ggsB_</a> | Alignment | not modelled | 83.0 | 16 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 273aa long hypothetical dtdp-4-dehydrorhamnose<br><b>PDBTitle:</b> crystal structure of hypothetical dtdp-4-dehydrorhamnose2 reductase from sulfolobus tokodaii                                                      |
| 102 | <a href="#">d1kewa_</a> | Alignment | not modelled | 82.9 | 14 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                              |
| 103 | <a href="#">d1vl0a_</a> | Alignment | not modelled | 82.6 | 13 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                                                              |
|     |                         |           |              |      |    | <b>PDB header:</b> ligase                                                                                                                                                                                                                                                                       |

|     |                         |           |              |      |    |                                                                                                                                                                                                                                                        |
|-----|-------------------------|-----------|--------------|------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 104 | <a href="#">c2yyaB_</a> | Alignment | not modelled | 82.4 | 11 | <b>Chain:</b> B: <b>PDB Molecule:</b> phosphoribosylamine--glycine ligase;<br><b>PDBTitle:</b> crystal structure of gar synthetase from aquifex aeolicus                                                                                               |
| 105 | <a href="#">c2qhxB_</a> | Alignment | not modelled | 82.3 | 13 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> pteridine reductase 1;<br><b>PDBTitle:</b> structure of pteridine reductase from leishmania major2 complexed with a ligand                                                  |
| 106 | <a href="#">d1e7wa_</a> | Alignment | not modelled | 82.1 | 13 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                     |
| 107 | <a href="#">d2bl1a1</a> | Alignment | not modelled | 82.1 | 19 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                     |
| 108 | <a href="#">c2hunB_</a> | Alignment | not modelled | 82.0 | 19 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 336aa long hypothetical dtdp-glucose 4,6-dehydratase;<br><b>PDBTitle:</b> crystal structure of hypothetical protein ph0414 from pyrococcus2 horikoshii ot3                           |
| 109 | <a href="#">d1jaya_</a> | Alignment | not modelled | 81.9 | 30 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> 6-phosphogluconate dehydrogenase-like, N-terminal domain                                                               |
| 110 | <a href="#">d1n2sa_</a> | Alignment | not modelled | 81.7 | 20 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                     |
| 111 | <a href="#">c3i4fD_</a> | Alignment | not modelled | 81.6 | 9  | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> D: <b>PDB Molecule:</b> 3-oxoacyl-[acyl-carrier protein] reductase;<br><b>PDBTitle:</b> structure of putative 3-oxoacyl-reductase from bacillus thuringiensis                                       |
| 112 | <a href="#">c3gpiA_</a> | Alignment | not modelled | 81.5 | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> nad-dependent epimerase/dehydratase;<br><b>PDBTitle:</b> structure of putative nad-dependent epimerase/dehydratase2 from methylobacillus flagellatus |
| 113 | <a href="#">c2pvpB_</a> | Alignment | not modelled | 80.5 | 21 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> d-alanine-d-alanine ligase;<br><b>PDBTitle:</b> crystal structure of d-alanine-d-alanine ligase from helicobacter2 pylori                                                           |
| 114 | <a href="#">d1rta_</a>  | Alignment | not modelled | 79.7 | 15 | <b>Fold:</b> Flavodoxin-like<br><b>Superfamily:</b> Flavoproteins<br><b>Family:</b> NADPH-dependent FMN reductase                                                                                                                                      |
| 115 | <a href="#">c2ys6A_</a> | Alignment | not modelled | 78.1 | 11 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide synthetase;<br><b>PDBTitle:</b> crystal structure of gar synthetase from geobacillus kaustophilus                                                         |
| 116 | <a href="#">c2ejbA_</a> | Alignment | not modelled | 77.5 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable aromatic acid decarboxylase;<br><b>PDBTitle:</b> crystal structure of phenylacrylic acid decarboxylase from2 aquifex aeolicus                                               |
| 117 | <a href="#">c2e6gl_</a> | Alignment | not modelled | 76.3 | 11 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> I: <b>PDB Molecule:</b> 5'-nucleotidase sure;<br><b>PDBTitle:</b> crystal structure of the stationary phase survival protein sure from2 thermus thermophilus hb8 in complex with phosphate               |
| 118 | <a href="#">d1q74a_</a> | Alignment | not modelled | 76.2 | 15 | <b>Fold:</b> LmbE-like<br><b>Superfamily:</b> LmbE-like<br><b>Family:</b> LmbE-like                                                                                                                                                                    |
| 119 | <a href="#">c1zggA_</a> | Alignment | not modelled | 76.2 | 19 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative low molecular weight protein-tyrosine-<br><b>PDBTitle:</b> solution structure of a low molecular weight protein2 tyrosine phosphatase from bacillus subtilis            |
| 120 | <a href="#">d1r6da_</a> | Alignment | not modelled | 75.1 | 22 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases                                                                                     |