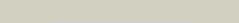
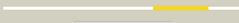
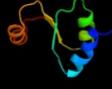
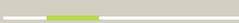
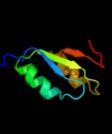
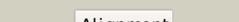
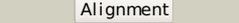
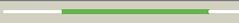
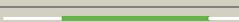


# Phyre2

|               |                             |
|---------------|-----------------------------|
| Email         | I.a.kelley@imperial.ac.uk   |
| Description   | P0AFP6                      |
| Date          | Thu Jan 5 11:26:55 GMT 2012 |
| Unique Job ID | 3256e87d70639983            |

Detailed template information

| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information  |
|----|-------------------------|---|---|------------|--------|---|
| 1  | <a href="#">d1nmpa_</a> |  Alignment   |    | 100.0      | 100    | <b>Fold:</b> NIF3 (NGG1p interacting factor 3)-like<br><b>Superfamily:</b> NIF3 (NGG1p interacting factor 3)-like<br><b>Family:</b> NIF3 (NGG1p interacting factor 3)-like  |
| 2  | <a href="#">c2nydB_</a> |  Alignment   |    | 100.0      | 23     | <b>PDB header:</b> unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> upf0135 protein sa1388;<br><b>PDBTitle:</b> crystal structure of staphylococcus aureus hypothetical protein sa1388   |
| 3  | <a href="#">c2gx8B_</a> |  Alignment   |    | 100.0      | 25     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> nif3-related protein;<br><b>PDBTitle:</b> the crystal stucture of bacillus cereus protein related to nif3                                 |
| 4  | <a href="#">d2gx8a1</a> |  Alignment   |   | 100.0      | 25     | <b>Fold:</b> NIF3 (NGG1p interacting factor 3)-like<br><b>Superfamily:</b> NIF3 (NGG1p interacting factor 3)-like<br><b>Family:</b> NIF3 (NGG1p interacting factor 3)-like  |
| 5  | <a href="#">c2yybA_</a> |  Alignment |  | 100.0      | 37     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein ttha1606;<br><b>PDBTitle:</b> crystal structure of ttha1606 from thermus thermophilus hb8                            |
| 6  | <a href="#">d2fywa1</a> |  Alignment |  | 100.0      | 24     | <b>Fold:</b> NIF3 (NGG1p interacting factor 3)-like<br><b>Superfamily:</b> NIF3 (NGG1p interacting factor 3)-like<br><b>Family:</b> NIF3 (NGG1p interacting factor 3)-like  |
| 7  | <a href="#">c3rxyA_</a> |  Alignment |  | 99.9       | 20     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> nif3 protein;<br><b>PDBTitle:</b> crystal structure of nif3 superfamily protein from sphaerobacter2 thermophilus                          |
| 8  | <a href="#">c2yx6C_</a> |  Alignment |  | 85.0       | 12     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> C: <b>PDB Molecule:</b> hypothetical protein ph0822;<br><b>PDBTitle:</b> crystal structure of ph0822  |
| 9  | <a href="#">c3qc3B_</a> |  Alignment |  | 83.4       | 14     | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> d-ribulose-5-phosphate-3-epimerase;<br><b>PDBTitle:</b> crystal structure of a d-ribulose-5-phosphate-3-epimerase (np_954699)2 from homo sapiens at 2.20 a resolution |
| 10 | <a href="#">c2am1A_</a> |  Alignment |  | 79.3       | 11     | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> udp-n-acetylmuramoyl alanine-d-glutamyl-lysine-d-alanyl-d-<br><b>PDBTitle:</b> sp protein ligand 1   |
| 11 | <a href="#">d1w0ma_</a> |  Alignment |  | 77.7       | 18     | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Triosephosphate isomerase (TIM)<br><b>Family:</b> Triosephosphate isomerase (TIM)   |

|    |                         |   |   |      |    |   |
|----|-------------------------|---|---|------|----|---|
| 12 | <a href="#">d1t3va_</a> |  Alignment   |    | 75.8 | 13 | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Nitrogenase accessory factor-like<br><b>Family:</b> MTH1175-like  |
| 13 | <a href="#">d1e01a_</a> |  Alignment   |    | 75.4 | 23 | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Nitrogenase accessory factor-like<br><b>Family:</b> MTH1175-like  |
| 14 | <a href="#">c3e96B_</a> |  Alignment   |    | 70.8 | 19 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dihydrodipicolinate synthase;<br><b>PDBTitle:</b> crystal structure of dihydrodipicolinate synthase from2 bacillus clausii  |
| 15 | <a href="#">c2wfbA_</a> |  Alignment   |    | 67.3 | 20 | <b>PDB header:</b> biosynthetic protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein orp;<br><b>PDBTitle:</b> high resolution structure of the apo form of the orange2 protein (orp) from desulfovibrio gigas                                      |
| 16 | <a href="#">c3d0cB_</a> |  Alignment   |    | 66.0 | 22 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dihydrodipicolinate synthase;<br><b>PDBTitle:</b> crystal structure of dihydrodipicolinate synthase from2 oceanobacillus iheyensis at 1.9 a resolution  |
| 17 | <a href="#">c3aamA_</a> |  Alignment   |   | 65.6 | 15 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease iv;<br><b>PDBTitle:</b> crystal structure of endonuclease iv from thermus thermophilus hb8   |
| 18 | <a href="#">c3c6kC_</a> |  Alignment |  | 64.4 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> spermine synthase;<br><b>PDBTitle:</b> crystal structure of human spermine synthase in complex2 with spermidine and 5-methylthioadenosine   |
| 19 | <a href="#">c3ct7E_</a> |  Alignment |  | 64.1 | 17 | <b>PDB header:</b> isomerase<br><b>Chain:</b> E: <b>PDB Molecule:</b> d-allulose-6-phosphate 3-epimerase;<br><b>PDBTitle:</b> crystal structure of d-allulose 6-phosphate 3-epimerase2 from escherichia coli k-12   |
| 20 | <a href="#">d1p3da1</a> |  Alignment |  | 63.9 | 17 | <b>Fold:</b> MurCD N-terminal domain<br><b>Superfamily:</b> MurCD N-terminal domain<br><b>Family:</b> MurCD N-terminal domain   |
| 21 | <a href="#">c3jr2D_</a> |  Alignment | not modelled  | 61.3 | 14 | <b>PDB header:</b> biosynthetic protein<br><b>Chain:</b> D: <b>PDB Molecule:</b> hexulose-6-phosphate synthase sgbh;<br><b>PDBTitle:</b> x-ray crystal structure of the mg-bound 3-keto-l-gulonate-6-phosphate2 decarboxylase from vibrio cholerae o1 biovar el tor str. n16961 |
| 22 | <a href="#">d1afsa_</a> |  Alignment | not modelled  | 59.8 | 9  | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> NAD(P)-linked oxidoreductase<br><b>Family:</b> Aldo-keto reductases (NADP)  |
| 23 | <a href="#">c2yw3E_</a> |  Alignment | not modelled  | 59.3 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> E: <b>PDB Molecule:</b> 4-hydroxy-2-oxoglutarate aldolase/2-deydro-3-<br><b>PDBTitle:</b> crystal structure analysis of the 4-hydroxy-2-oxoglutarate aldolase/2-2 deydro-3-deoxyphosphogluconate aldolase from tthb1                  |
| 24 | <a href="#">d1u83a_</a> |  Alignment | not modelled  | 58.1 | 16 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> (2r)-phospho-3-sulfolactate synthase ComA<br><b>Family:</b> (2r)-phospho-3-sulfolactate synthase ComA   |
| 25 | <a href="#">c1u83A_</a> |  Alignment | not modelled  | 58.1 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphosulfolactate synthase;<br><b>PDBTitle:</b> psl synthase from bacillus subtilis   |
| 26 | <a href="#">d1us0a_</a> |  Alignment | not modelled  | 57.6 | 13 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> NAD(P)-linked oxidoreductase<br><b>Family:</b> Aldo-keto reductases (NADP)  |
| 27 | <a href="#">d1xp3a1</a> |  Alignment | not modelled  | 55.8 | 22 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Xylose isomerase-like<br><b>Family:</b> Endonuclease IV   |
| 28 | <a href="#">d1e7wa_</a> |  Alignment | not modelled  | 55.5 | 24 | <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  |

|    |                         |           |              |      |    |   |
|----|-------------------------|-----------|--------------|------|----|---|
| 29 | <a href="#">dlrdua_</a> | Alignment | not modelled | 52.5 | 18 | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Nitrogenase accessory factor-like<br><b>Family:</b> MTH1175-like  |
| 30 | <a href="#">d2flia1</a> | Alignment | not modelled | 52.1 | 16 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> D-ribulose-5-phosphate 3-epimerase  |
| 31 | <a href="#">c3o26A_</a> | Alignment | not modelled | 51.5 | 32 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> salutaridine reductase;<br><b>PDBTitle:</b> the structure of salutaridine reductase from papaver somniferum.   |
| 32 | <a href="#">c3p19A_</a> | Alignment | not modelled | 51.0 | 18 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative blue fluorescent protein;<br><b>PDBTitle:</b> improved nadph-dependent blue fluorescent protein   |
| 33 | <a href="#">dlp90a_</a> | Alignment | not modelled | 50.5 | 6  | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Nitrogenase accessory factor-like<br><b>Family:</b> Nitrogenase accessory factor  |
| 34 | <a href="#">d3clsc1</a> | Alignment | not modelled | 47.9 | 16 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Adenine nucleotide alpha hydrolases-like<br><b>Family:</b> ETFP subunits  |
| 35 | <a href="#">c2re2A_</a> | Alignment | not modelled | 47.9 | 12 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein ta1041;<br><b>PDBTitle:</b> crystal structure of a putative iron-molybdenum cofactor (femo-co)2 dinitrogenase (ta1041m) from thermoplasma acidophilum dsm 1728 at3 1.30 a resolution |
| 36 | <a href="#">dlp33a_</a> | Alignment | not modelled | 47.1 | 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  |
| 37 | <a href="#">dlh1ya_</a> | Alignment | not modelled | 46.6 | 16 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> D-ribulose-5-phosphate 3-epimerase  |
| 38 | <a href="#">c3pdiB_</a> | Alignment | not modelled | 46.2 | 17 | <b>PDB header:</b> protein binding<br><b>Chain:</b> B: <b>PDB Molecule:</b> nitrogenase mofe cofactor biosynthesis protein nifn;<br><b>PDBTitle:</b> precursor bound nifen  |
| 39 | <a href="#">dlj6ua1</a> | Alignment | not modelled | 46.1 | 14 | <b>Fold:</b> MurCD N-terminal domain<br><b>Superfamily:</b> MurCD N-terminal domain<br><b>Family:</b> MurCD N-terminal domain   |
| 40 | <a href="#">c2foiB_</a> | Alignment | not modelled | 44.6 | 18 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> enoyl-acyl carrier reductase;<br><b>PDBTitle:</b> synthesis, biological activity, and x-ray crystal structural analysis2 of diaryl ether inhibitors of malarial enoyl acp reductase.                         |
| 41 | <a href="#">c2nq8B_</a> | Alignment | not modelled | 44.6 | 18 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> enoyl-acyl carrier reductase;<br><b>PDBTitle:</b> malarial enoyl acyl acp reductase bound with inh-nad adduct  |
| 42 | <a href="#">c2wtzC_</a> | Alignment | not modelled | 44.6 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> C: <b>PDB Molecule:</b> udp-n-acetylmuramoyl-l-alanyl-d-glutamate-<br><b>PDBTitle:</b> mure ligase of mycobacterium tuberculosis   |
| 43 | <a href="#">c3ppiA_</a> | Alignment | not modelled | 43.9 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 3-hydroxyacyl-coa dehydrogenase type-2;<br><b>PDBTitle:</b> crystal structure of 3-hydroxyacyl-coa dehydrogenase type-2 from2 mycobacterium avium  |
| 44 | <a href="#">d2pv7a2</a> | Alignment | not modelled | 42.7 | 17 | <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  |
| 45 | <a href="#">dluh5a_</a> | Alignment | not modelled | 41.9 | 18 | <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  |
| 46 | <a href="#">dlkm4a_</a> | Alignment | not modelled | 41.7 | 17 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> Decarboxylase   |
| 47 | <a href="#">dlrpxa_</a> | Alignment | not modelled | 40.9 | 15 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> D-ribulose-5-phosphate 3-epimerase  |
| 48 | <a href="#">clzciA_</a> | Alignment | not modelled | 40.7 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> peroxisomal bifunctional enzyme;<br><b>PDBTitle:</b> crystal structure of 3-hydroxyacyl-coa dehydrogenase  |
| 49 | <a href="#">c3lf2B_</a> | Alignment | not modelled | 40.3 | 30 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> short chain oxidoreductase q9hya2;<br><b>PDBTitle:</b> nadph bound structure of the short chain oxidoreductase q9hya2 from2 pseudomonas aeruginosa pao1 containing an atypical catalytic center              |
| 50 | <a href="#">dlol3a_</a> | Alignment | not modelled | 39.6 | 7  | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Nitrogenase accessory factor-like<br><b>Family:</b> MTH1175-like  |
| 51 | <a href="#">c3inpA_</a> | Alignment | not modelled | 39.5 | 20 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> d-ribulose-phosphate 3-epimerase;<br><b>PDBTitle:</b> 2.05 angstrom resolution crystal structure of d-ribulose-phosphate 3-2 epimerase from francisella tularensis.   |
| 52 | <a href="#">c3t4xA_</a> | Alignment | not modelled | 39.0 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> oxidoreductase, short chain dehydrogenase/reductase family;<br><b>PDBTitle:</b> short chain dehydrogenase/reductase family oxidoreductase from2 bacillus anthracis str. ames ancestor                        |
| 53 | <a href="#">dlgega_</a> | Alignment | not modelled | 38.8 | 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  |
|    |                         |           |              |      |    | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains   |

|    |                         |           |              |      |    |  |
|----|-------------------------|-----------|--------------|------|----|--|
| 54 | <a href="#">d1yxma1</a> | Alignment | not modelled | 38.7 | 33 | <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Tyrosine-dependent oxidoreductases  |
| 55 | <a href="#">c3l77A</a>  | Alignment | not modelled | 38.6 | 33 | <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  |
| 56 | <a href="#">c3dhnA</a>  | Alignment | not modelled | 38.2 | 17 | <b>PDB header:</b> isomerase, lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> nad-dependent epimerase/dehydratase;<br><b>PDBTitle:</b> crystal structure of the putative epimerase q89z24_bactn2 from bacteroides thetaiotaomicron. northeast structural3 genomics consortium target btr310.        |
| 57 | <a href="#">c3noeA</a>  | Alignment | not modelled | 38.1 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dihydrodipicolinate synthase;<br><b>PDBTitle:</b> crystal structure of dihydrodipicolinate synthase from pseudomonas2 aeruginosa   |
| 58 | <a href="#">c2ehhE</a>  | Alignment | not modelled | 37.8 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> E: <b>PDB Molecule:</b> dihydrodipicolinate synthase;<br><b>PDBTitle:</b> crystal structure of dihydrodipicolinate synthase from2 aquifex aeolicus   |
| 59 | <a href="#">d2hmva1</a> | Alignment | not modelled | 37.7 | 17 | <b>Fold:</b> NAD(P)-binding Rossmann-fold domains<br><b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains<br><b>Family:</b> Potassium channel NAD-binding domain   |
| 60 | <a href="#">d1nu0a</a>  | Alignment | not modelled | 36.3 | 13 | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Ribonuclease H-like<br><b>Family:</b> Putative Holliday junction resolvase RuvX  |
| 61 | <a href="#">d1fjha</a>  | Alignment | not modelled | 36.3 | 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   |
| 62 | <a href="#">d1dvja</a>  | Alignment | not modelled | 36.0 | 16 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> Decarboxylase  |
| 63 | <a href="#">c2ntnB</a>  | Alignment | not modelled | 35.3 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 3-oxoacyl-[acyl-carrier-protein] reductase;<br><b>PDBTitle:</b> crystal structure of maba-c60v/g139a/s144l  |
| 64 | <a href="#">c3s55F</a>  | Alignment | not modelled | 34.9 | 41 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> F: <b>PDB Molecule:</b> putative short-chain dehydrogenase/reductase;<br><b>PDBTitle:</b> crystal structure of a putative short-chain dehydrogenase/reductase2 from mycobacterium abscessus bound to nad  |
| 65 | <a href="#">d2gv8a1</a> | Alignment | not modelled | 34.2 | 13 | <b>Fold:</b> FAD/NAD(P)-binding domain<br><b>Superfamily:</b> FAD/NAD(P)-binding domain<br><b>Family:</b> FAD/NAD-linked reductases, N-terminal and central domains  |
| 66 | <a href="#">d1uaya</a>  | Alignment | not modelled | 34.1 | 30 | <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   |
| 67 | <a href="#">c3bmrA</a>  | Alignment | not modelled | 33.7 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> pteridine reductase;<br><b>PDBTitle:</b> structure of pteridine reductase 1 (ptr1) from trypanosoma2 brucei in ternary complex with cofactor (nadp+) and3 inhibitor (compound ax6)                                      |
| 68 | <a href="#">c3un1D</a>  | Alignment | not modelled | 33.5 | 25 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> D: <b>PDB Molecule:</b> probable oxidoreductase;<br><b>PDBTitle:</b> crystal structure of an oxidoreductase from sinorhizobium meliloti2 1021   |
| 69 | <a href="#">d1vhxa</a>  | Alignment | not modelled | 33.3 | 13 | <b>Fold:</b> Ribonuclease H-like motif<br><b>Superfamily:</b> Ribonuclease H-like<br><b>Family:</b> Putative Holliday junction resolvase RuvX  |
| 70 | <a href="#">c2x58B</a>  | Alignment | not modelled | 33.2 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> peroxisomal bifunctional enzyme;<br><b>PDBTitle:</b> the crystal structure of mfe1 liganded with coa  |
| 71 | <a href="#">c2vdcl</a>  | Alignment | not modelled | 32.9 | 12 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> I: <b>PDB Molecule:</b> glutamate synthase [nadph] small chain;<br><b>PDBTitle:</b> the 9.5 a resolution structure of glutamate synthase from2 cryo-electron microscopy and its oligomerization behavior3 in solution: functional implications. |
| 72 | <a href="#">d2gdza1</a> | Alignment | not modelled | 32.8 | 30 | <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   |
| 73 | <a href="#">c3gk3D</a>  | Alignment | not modelled | 32.5 | 20 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> D: <b>PDB Molecule:</b> acetoacetyl-coa reductase;<br><b>PDBTitle:</b> crystal structure of acetoacetyl-coa reductase from2 burkholderia pseudomallei 1710b   |
| 74 | <a href="#">c3g0sA</a>  | Alignment | not modelled | 32.5 | 12 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dihydrodipicolinate synthase;<br><b>PDBTitle:</b> dihydrodipicolinate synthase from salmonella typhimurium lt2   |
| 75 | <a href="#">c3tfoD</a>  | Alignment | not modelled | 31.9 | 26 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> D: <b>PDB Molecule:</b> putative 3-oxoacyl-(acyl-carrier-protein) reductase;<br><b>PDBTitle:</b> crystal structure of a putative 3-oxoacyl-(acyl-carrier-protein)2 reductase from sinorhizobium meliloti  |
| 76 | <a href="#">c3dz1A</a>  | Alignment | not modelled | 31.7 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dihydrodipicolinate synthase;<br><b>PDBTitle:</b> crystal structure of dihydrodipicolinate synthase from2 rhodospseudomonas palustris at 1.87a resolution  |
| 77 | <a href="#">c2p91A</a>  | Alignment | not modelled | 31.5 | 26 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-[acyl-carrier-protein] reductase [nadh];<br><b>PDBTitle:</b> crystal structure of enoyl-[acyl-carrier-protein] reductase (nadh)2 from aquifex aeolicus vf5  |
| 78 | <a href="#">c2nm0B</a>  | Alignment | not modelled | 31.5 | 36 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> probable 3-oxacyl-(acyl-carrier-protein) reductase;<br><b>PDBTitle:</b> crystal structure of sco1815: a beta-ketoacyl-acyl carrier  |

|     |                         |           |              |      |    |   |
|-----|-------------------------|-----------|--------------|------|----|---|
|     |                         |           |              |      |    | protein2 reductase from streptomyces coelicolor a3(2)   |
| 79  | <a href="#">d1xq1a_</a> | Alignment | not modelled | 31.5 | 30 | <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  |
| 80  | <a href="#">c3k6jA_</a> | Alignment | not modelled | 31.2 | 24 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein f01g10.3, confirmed by transcript evidence;<br><b>PDBTitle:</b> crystal structure of the dehydrogenase part of multifunctional enzyme 12 from c.elegans  |
| 81  | <a href="#">d2d1ya1</a> | Alignment | not modelled | 30.8 | 30 | <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  |
| 82  | <a href="#">c2pv7B_</a> | Alignment | not modelled | 30.6 | 17 | <b>PDB header:</b> isomerase, oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> t-protein [includes: chorismate mutase (ec 5.4.99.5) (cm)<br><b>PDBTitle:</b> crystal structure of chorismate mutase / prephenate dehydrogenase2 (tyra) (1574749) from haemophilus influenzae rd at 2.00 a resolution |
| 83  | <a href="#">d1xg5a_</a> | Alignment | not modelled | 30.2 | 30 | <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  |
| 84  | <a href="#">c2qhxB_</a> | Alignment | not modelled | 30.0 | 28 | <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   |
| 85  | <a href="#">c3i1jB_</a> | Alignment | not modelled | 29.9 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> oxidoreductase, short chain<br><b>PDBTitle:</b> structure of a putative short chain dehydrogenase from2 pseudomonas syringae   |
| 86  | <a href="#">d1f6ya_</a> | Alignment | not modelled | 29.4 | 15 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Dihydropteroate synthetase-like<br><b>Family:</b> Methyltetrahydrofolate-utilizing methyltransferases   |
| 87  | <a href="#">c2vt2A_</a> | Alignment | not modelled | 29.1 | 18 | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> redox-sensing transcriptional repressor rex;<br><b>PDBTitle:</b> structure and functional properties of the bacillus2 subtilis transcriptional repressor rex  |
| 88  | <a href="#">c3rihB_</a> | Alignment | not modelled | 28.7 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> short chain dehydrogenase or reductase;<br><b>PDBTitle:</b> crystal structure of a putative short chain dehydrogenase or reductase2 from mycobacterium abscessus   |
| 89  | <a href="#">d1ah4a_</a> | Alignment | not modelled | 28.6 | 13 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> NAD(P)-linked oxidoreductase<br><b>Family:</b> Aldo-keto reductases (NADP)  |
| 90  | <a href="#">c3f5sA_</a> | Alignment | not modelled | 28.5 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dehydrogenase;<br><b>PDBTitle:</b> crystal structure of putative short chain dehydrogenase from shigella2 flexneri 2a str. 301   |
| 91  | <a href="#">c3n2xB_</a> | Alignment | not modelled | 28.4 | 18 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein yage;<br><b>PDBTitle:</b> crystal structure of yage, a prophage protein belonging to the2 dihydrodipicolinic acid synthase family from e. coli k12 in complex3 with pyruvate                                      |
| 92  | <a href="#">c3uxyC_</a> | Alignment | not modelled | 28.1 | 30 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> C: <b>PDB Molecule:</b> short-chain dehydrogenase/reductase sdr;<br><b>PDBTitle:</b> the crystal structure of short chain dehydrogenase from rhodobacter2 sphaeroides  |
| 93  | <a href="#">c3n0vD_</a> | Alignment | not modelled | 28.1 | 13 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> D: <b>PDB Molecule:</b> formyltetrahydrofolate deformylase;<br><b>PDBTitle:</b> crystal structure of a formyltetrahydrofolate deformylase (pp_0327)2 from pseudomonas putida kt2440 at 2.25 a resolution  |
| 94  | <a href="#">d2h7ma1</a> | Alignment | not modelled | 28.1 | 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  |
| 95  | <a href="#">d1zk4a1</a> | Alignment | not modelled | 28.0 | 41 | <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  |
| 96  | <a href="#">c1zmoF_</a> | Alignment | not modelled | 28.0 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> F: <b>PDB Molecule:</b> halohydrin dehalogenase;<br><b>PDBTitle:</b> apo structure of haloalcohol dehalogenase hhea of2 arthrobacter sp. ad2  |
| 97  | <a href="#">d2bela_</a> | Alignment | not modelled | 27.8 | 26 | <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  |
| 98  | <a href="#">d1vqta1</a> | Alignment | not modelled | 27.4 | 13 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> Decarboxylase   |
| 99  | <a href="#">d1s1pa_</a> | Alignment | not modelled | 27.3 | 11 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> NAD(P)-linked oxidoreductase<br><b>Family:</b> Aldo-keto reductases (NADP)  |
| 100 | <a href="#">c3louB_</a> | Alignment | not modelled | 27.2 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> formyltetrahydrofolate deformylase;<br><b>PDBTitle:</b> crystal structure of formyltetrahydrofolate deformylase (yp_105254.1)2 from burkholderia mallei atcc 23344 at 1.90 a resolution   |
| 101 | <a href="#">c3sc4A_</a> | Alignment | not modelled | 27.0 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> short chain dehydrogenase (a0qtm2 homolog);<br><b>PDBTitle:</b> crystal structure of a short chain dehydrogenase (a0qtm2 homolog)2 mycobacterium thermoresistibile   |
| 102 | <a href="#">c3qivA_</a> | Alignment | not modelled | 26.8 | 41 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> short-chain dehydrogenase or 3-oxoacyl-[acyl-carrier-<br><b>PDBTitle:</b> crystal structure of a putative short-chain dehydrogenase or 3-2 oxoacyl-[acyl-carrier-protein] reductase from   |

|     |                         |           |              |      |    |  |
|-----|-------------------------|-----------|--------------|------|----|--|
|     |                         |           |              |      |    | mycobacterium3 paratuberculosis atcc baa-968 / k-10  |
| 103 | <a href="#">c2ydyA_</a> | Alignment | not modelled | 26.7 | 21 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionine adenosyltransferase 2 subunit beta;<br><b>PDBTitle:</b> crystal structure of human s-adenosylmethionine synthetase2 2, beta subunit in orthorhombic crystal form     |
| 104 | <a href="#">d1vjda_</a> | Alignment | not modelled | 26.7 | 15 | <b>Fold:</b> Phosphoglycerate kinase<br><b>Superfamily:</b> Phosphoglycerate kinase<br><b>Family:</b> Phosphoglycerate kinase  |
| 105 | <a href="#">c2dknA_</a> | Alignment | not modelled | 26.4 | 30 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 3-alpha-hydroxysteroid dehydrogenase;<br><b>PDBTitle:</b> crystal structure of the 3-alpha-hydroxysteroid dehydrogenase from2 pseudomonas sp. b-0831 complexed with nadh        |
| 106 | <a href="#">c2w1vA_</a> | Alignment | not modelled | 26.1 | 7  | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> nitrilase homolog 2;<br><b>PDBTitle:</b> crystal structure of mouse nitrilase-2 at 1.4a resolution   |
| 107 | <a href="#">d1xcfa_</a> | Alignment | not modelled | 26.1 | 17 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> Tryptophan biosynthesis enzymes  |
| 108 | <a href="#">c3ezlA_</a> | Alignment | not modelled | 26.0 | 20 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> acetoacetyl-coa reductase;<br><b>PDBTitle:</b> crystal structure of acetylacetyl-coa reductase from2 burkholderia pseudomallei 1710b  |
| 109 | <a href="#">c1yb1B_</a> | Alignment | not modelled | 25.8 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 17-beta-hydroxysteroid dehydrogenase type xi;<br><b>PDBTitle:</b> crystal structure of human 17-beta-hydroxysteroid dehydrogenase type2 xi                                      |
| 110 | <a href="#">d1xu9a_</a> | Alignment | not modelled | 25.8 | 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   |
| 111 | <a href="#">c2x7vA_</a> | Alignment | not modelled | 25.7 | 11 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable endonuclease 4;<br><b>PDBTitle:</b> crystal structure of thermotoga maritima endonuclease iv in2 the presence of zinc   |
| 112 | <a href="#">c3tfxB_</a> | Alignment | not modelled | 25.4 | 19 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> orotidine 5'-phosphate decarboxylase;<br><b>PDBTitle:</b> crystal structure of orotidine 5'-phosphate decarboxylase from2 lactobacillus acidophilus                                      |
| 113 | <a href="#">d1o94c_</a> | Alignment | not modelled | 25.3 | 17 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Adenine nucleotide alpha hydrolases-like<br><b>Family:</b> ETFP subunits   |
| 114 | <a href="#">d1gtea3</a> | Alignment | not modelled | 25.3 | 16 | <b>Fold:</b> FAD/NAD(P)-binding domain<br><b>Superfamily:</b> FAD/NAD(P)-binding domain<br><b>Family:</b> C-terminal domain of adrenodoxin reductase-like  |
| 115 | <a href="#">c3rd5A_</a> | Alignment | not modelled | 25.1 | 30 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> mypaa.01249.c;<br><b>PDBTitle:</b> crystal structure of a putative uncharacterized protein from2 mycobacterium paratuberculosis   |
| 116 | <a href="#">c3q2oB_</a> | Alignment | not modelled | 24.8 | 18 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> phosphoribosylaminoimidazole carboxylase, atpase subunit;<br><b>PDBTitle:</b> crystal structure of purk: n5-carboxyaminoimidazole ribonucleotide2 synthetase                             |
| 117 | <a href="#">d1rd5a_</a> | Alignment | not modelled | 24.7 | 20 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Ribulose-phosphate binding barrel<br><b>Family:</b> Tryptophan biosynthesis enzymes  |
| 118 | <a href="#">d1x1ta1</a> | Alignment | not modelled | 24.6 | 37 | <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   |
| 119 | <a href="#">c3uvzB_</a> | Alignment | not modelled | 24.4 | 22 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> phosphoribosylaminoimidazole carboxylase, atpase subunit;<br><b>PDBTitle:</b> crystal structure of phosphoribosylaminoimidazole carboxylase, atpase2 subunit from burkholderia ambifaria |
| 120 | <a href="#">c2hjwA_</a> | Alignment | not modelled | 24.3 | 16 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> acetyl-coa carboxylase 2;<br><b>PDBTitle:</b> crystal structure of the bc domain of acc2  |