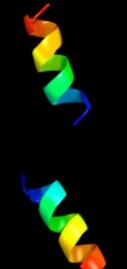
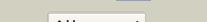
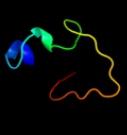
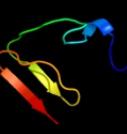
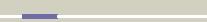
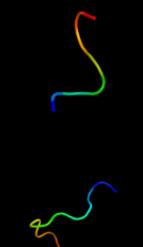
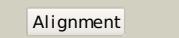
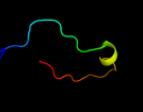
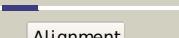
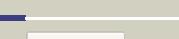
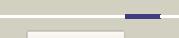


# Phyre<sup>2</sup>

|               |                             |
|---------------|-----------------------------|
| Email         | i.a.kelley@imperial.ac.uk   |
| Description   | P18353                      |
| Date          | Thu Jan 5 11:36:50 GMT 2012 |
| Unique Job ID | cb70043c03d36dc2            |

Detailed template information

| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information   |
|----|-------------------------|---|---|------------|--------|--|
| 1  | <a href="#">c1w5cL</a>  |    |    | 22.3       | 54     | <b>PDB header:</b> photosynthesis<br><b>Chain:</b> L: <b>PDB Molecule:</b> cytochrome b559 beta subunit;<br><b>PDBTitle:</b> photosystem ii from thermosynechococcus elongatus                                   |
| 2  | <a href="#">d2axtf1</a> |    |    | 21.8       | 54     | <b>Fold:</b> Single transmembrane helix<br><b>Superfamily:</b> Cytochrome b559 subunits<br><b>Family:</b> Cytochrome b559 subunits   |
| 3  | <a href="#">d1c2aa1</a> |    |    | 19.2       | 36     | <b>Fold:</b> Knottins (small inhibitors, toxins, lectins)<br><b>Superfamily:</b> Bowman-Birk inhibitor, BBI<br><b>Family:</b> Bowman-Birk inhibitor, BBI   |
| 4  | <a href="#">d1fl2a2</a> |    |   | 15.0       | 19     | <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  |
| 5  | <a href="#">d1j83a</a>  |  |  | 14.3       | 38     | <b>Fold:</b> Galactose-binding domain-like<br><b>Superfamily:</b> Galactose-binding domain-like<br><b>Family:</b> Family 17 carbohydrate binding module, CBM17   |
| 6  | <a href="#">d2fj8a1</a> |  |  | 13.8       | 50     | <b>Fold:</b> Knottins (small inhibitors, toxins, lectins)<br><b>Superfamily:</b> Bowman-Birk inhibitor, BBI<br><b>Family:</b> Bowman-Birk inhibitor, BBI   |
| 7  | <a href="#">d1efva2</a> |  |  | 11.1       | 18     | <b>Fold:</b> DHS-like NAD/FAD-binding domain<br><b>Superfamily:</b> DHS-like NAD/FAD-binding domain<br><b>Family:</b> C-terminal domain of the electron transfer flavoprotein alpha subunit                      |
| 8  | <a href="#">c1efpc</a>  |  |  | 11.0       | 24     | <b>PDB header:</b> electron transport<br><b>Chain:</b> C: <b>PDB Molecule:</b> protein (electron transfer flavoprotein);<br><b>PDBTitle:</b> electron transfer flavoprotein (etf) from paracoccus2 denitrificans |
| 9  | <a href="#">d1efpa2</a> |  |  | 10.9       | 18     | <b>Fold:</b> DHS-like NAD/FAD-binding domain<br><b>Superfamily:</b> DHS-like NAD/FAD-binding domain<br><b>Family:</b> C-terminal domain of the electron transfer flavoprotein alpha subunit                      |
| 10 | <a href="#">c1tx6j</a>  |  |  | 10.9       | 50     | <b>PDB header:</b> hydrolase/protein binding<br><b>Chain:</b> J: <b>PDB Molecule:</b> bowman-birk type trypsin inhibitor;<br><b>PDBTitle:</b> trypsin:bbi complex  |
| 11 | <a href="#">c2bi8A</a>  |  |  | 10.6       | 39     | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> udp-galactopyranose mutase;<br><b>PDBTitle:</b> udp-galactopyranose mutase from klebsiella pneumoniae with2 reduced fad                    |

|    |                         |   |   |     |    |   |
|----|-------------------------|---|---|-----|----|---|
| 12 | <a href="#">c1w1nA</a>  |    |     | 9.5 | 50 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phosphatidylinositol 3-kinase tor1;<br><b>PDBTitle:</b> the solution structure of the fatc domain of the protein2 kinase tor1 from yeast  |
| 13 | <a href="#">d1pb1a</a>  |    |    | 9.4 | 29 | <b>Fold:</b> Knottins (small inhibitors, toxins, lectins)<br><b>Superfamily:</b> Bowman-Birk inhibitor, BBI<br><b>Family:</b> Bowman-Birk inhibitor, BBI  |
| 14 | <a href="#">c2qn5B</a>  |    |    | 7.6 | 42 | <b>PDB header:</b> hydrolase inhibitor/hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> bowman-birk type bran trypsin inhibitor;<br><b>PDBTitle:</b> crystal structure and functional study of the bowman-birk2 inhibitor from rice bran in complex with bovine trypsin     |
| 15 | <a href="#">c2zyIA</a>  |    |    | 7.4 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> possible oxidoreductase;<br><b>PDBTitle:</b> crystal structure of 3-ketosteroid-9-alpha-hydroxylase2 (ksha) from m. tuberculosis   |
| 16 | <a href="#">c2pd0D</a>  |    |    | 7.3 | 38 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> D: <b>PDB Molecule:</b> hypothetical protein;<br><b>PDBTitle:</b> protein cgd2_2020 from cryptosporidium parvum   |
| 17 | <a href="#">d3cls2</a>  |    |   | 7.3 | 27 | <b>Fold:</b> DHS-like NAD/FAD-binding domain<br><b>Superfamily:</b> DHS-like NAD/FAD-binding domain<br><b>Family:</b> C-terminal domain of the electron transfer flavoprotein alpha subunit   |
| 18 | <a href="#">c2fqcA</a>  |  |  | 6.9 | 80 | <b>PDB header:</b> toxin<br><b>Chain:</b> A: <b>PDB Molecule:</b> conotoxin pl14a;<br><b>PDBTitle:</b> solution structure of conotoxin pl14a  |
| 19 | <a href="#">c1zq1D</a>  |  |  | 6.7 | 8  | <b>PDB header:</b> lyase<br><b>Chain:</b> D: <b>PDB Molecule:</b> glutamyl-tRNA(gln) amidotransferase subunit e;<br><b>PDBTitle:</b> structure of gatde tRNA-dependent amidotransferase from2 pyrococcus abyssi   |
| 20 | <a href="#">d2bi7a1</a> |  |  | 6.7 | 37 | <b>Fold:</b> Nucleotide-binding domain<br><b>Superfamily:</b> Nucleotide-binding domain<br><b>Family:</b> UDP-galactopyranose mutase, N-terminal domain   |
| 21 | <a href="#">d2d6fc3</a> |  | not modelled  | 6.6 | 21 | <b>Fold:</b> Glutamine synthetase/guanido kinase<br><b>Superfamily:</b> Glutamine synthetase/guanido kinase<br><b>Family:</b> GatB/GatE catalytic domain-like   |
| 22 | <a href="#">d1cqxa2</a> |  | not modelled  | 6.2 | 21 | <b>Fold:</b> Reductase/isomerase/elongation factor common domain<br><b>Superfamily:</b> Riboflavin synthase domain-like<br><b>Family:</b> Ferredoxin reductase FAD-binding domain-like  |
| 23 | <a href="#">d1u97a</a>  |  | not modelled  | 6.1 | 46 | <b>Fold:</b> Cysteine alpha-hairpin motif<br><b>Superfamily:</b> Cysteine alpha-hairpin motif<br><b>Family:</b> COX17-like  |
| 24 | <a href="#">d1pm6a</a>  |  | not modelled  | 5.9 | 20 | <b>Fold:</b> Putative DNA-binding domain<br><b>Superfamily:</b> Putative DNA-binding domain<br><b>Family:</b> Excisionase-like  |
| 25 | <a href="#">d1qmva</a>  |  | not modelled  | 5.8 | 23 | <b>Fold:</b> Thioredoxin fold<br><b>Superfamily:</b> Thioredoxin-like<br><b>Family:</b> Glutathione peroxidase-like   |
| 26 | <a href="#">c3fnvB</a>  |  | not modelled  | 5.8 | 40 | <b>PDB header:</b> metal binding protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> cdgsh iron sulfur domain-containing protein 2;<br><b>PDBTitle:</b> crystal structure of miner1: the redox-active 2fe-2s protein causative2 in wolfram syndrome 2                            |
| 27 | <a href="#">c2pnvA</a>  |  | not modelled  | 5.5 | 50 | <b>PDB header:</b> membrane protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> small conductance calcium-activated potassium<br><b>PDBTitle:</b> crystal structure of the leucine zipper domain of small-2 conductance ca2+-activated k+ (skca) channel from rattus3 norvegicus |
| 28 | <a href="#">c2rnba</a>  |  | not modelled  | 5.4 | 54 | <b>PDB header:</b> metal transport<br><b>Chain:</b> A: <b>PDB Molecule:</b> cytochrome c oxidase copper chaperone;<br><b>PDBTitle:</b> solution structure of human cu(i)cox17   |

|    |                         |           |              |     |    |   |
|----|-------------------------|-----------|--------------|-----|----|---|
| 29 | <a href="#">d2v1ra1</a> | Alignment | not modelled | 5.3 | 31 | <b>Fold:</b> SH3-like barrel<br><b>Superfamily:</b> SH3-domain<br><b>Family:</b> SH3-domain |
|----|-------------------------|-----------|--------------|-----|----|---|