

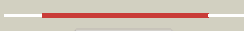



















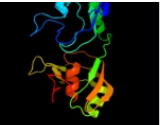










# Phyre2

|               |                             |
|---------------|-----------------------------|
| Email         | l.a.kelley@imperial.ac.uk   |
| Description   | P75966                      |
| Date          | Thu Jan 5 12:16:33 GMT 2012 |
| Unique Job ID | 27e34be6dea04f27            |

Detailed template information

| #  | Template                | Alignment Coverage   | 3D Model  | Confidence | % i.d. | Template Information  |
|----|-------------------------|--|---|------------|--------|---|
| 1  | <a href="#">c2omlA_</a> | <br>Alignment   |    | 100.0      | 94     | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase e;<br><b>PDBTitle:</b> crystal structure of e. coli pseudouridine synthase rlue                                |
| 2  | <a href="#">c2olwB_</a> | <br>Alignment   |    | 100.0      | 95     | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase e;<br><b>PDBTitle:</b> crystal structure of e. coli pseudouridine synthase rlue                                |
| 3  | <a href="#">c3dh3C_</a> | <br>Alignment   |    | 100.0      | 31     | <b>PDB header:</b> isomerase/rna<br><b>Chain:</b> C: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase f;<br><b>PDBTitle:</b> crystal structure of rluf in complex with a 22 nucleotide2 rna substrate            |
| 4  | <a href="#">c1vioA_</a> | <br>Alignment   |    | 100.0      | 28     | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal small subunit pseudouridine synthase a;<br><b>PDBTitle:</b> crystal structure of pseudouridylyate synthase  |
| 5  | <a href="#">c1kskA_</a> | <br>Alignment |  | 100.0      | 32     | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal small subunit pseudouridine synthase a;<br><b>PDBTitle:</b> structure of rsua   |
| 6  | <a href="#">c2gmlA_</a> | <br>Alignment |  | 100.0      | 35     | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase f;<br><b>PDBTitle:</b> crystal structure of catalytic domain of e.coli rluf                                    |
| 7  | <a href="#">d1vioa1</a> | <br>Alignment |  | 100.0      | 29     | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase RsuA/RIuD  |
| 8  | <a href="#">d1kska4</a> | <br>Alignment |  | 100.0      | 36     | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase RsuA/RIuD  |
| 9  | <a href="#">d1v9ka_</a> | <br>Alignment |  | 100.0      | 17     | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase RsuA/RIuD  |
| 10 | <a href="#">c1v9fA_</a> | <br>Alignment |  | 100.0      | 21     | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase d;<br><b>PDBTitle:</b> crystal structure of catalytic domain of pseudouridine2 synthase rlud from escherichia coli |
| 11 | <a href="#">d1v9fa_</a> | <br>Alignment |  | 100.0      | 21     | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase RsuA/RIuD  |

|    |                         |           |   |       |    |  |
|----|-------------------------|-----------|---|-------|----|--|
| 12 | <a href="#">c1qyuA</a>  | Alignment |     | 100.0 | 20 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase d;<br><b>PDBTitle:</b> structure of the catalytic domain of 23s rrna pseudouridine2 synthase rlud   |
| 13 | <a href="#">c2i82D</a>  | Alignment |    | 100.0 | 20 | <b>PDB header:</b> lyase/rna<br><b>Chain:</b> D: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase a;<br><b>PDBTitle:</b> crystal structure of pseudouridine synthase rlua: indirect2 sequence readout through protein-induced rna structure |
| 14 | <a href="#">d2apoa2</a> | Alignment |    | 98.8  | 13 | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase II TruB   |
| 15 | <a href="#">d2ey4a2</a> | Alignment |    | 98.8  | 17 | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase II TruB   |
| 16 | <a href="#">c2ey4A</a>  | Alignment |    | 98.7  | 15 | <b>PDB header:</b> isomerase/biosynthetic protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable trna pseudouridine synthase b;<br><b>PDBTitle:</b> crystal structure of a cbf5-nop10-gar1 complex  |
| 17 | <a href="#">d1r3ea2</a> | Alignment |    | 98.6  | 18 | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase II TruB   |
| 18 | <a href="#">c2apoA</a>  | Alignment |  | 98.6  | 14 | <b>PDB header:</b> isomerase/rna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable trna pseudouridine synthase b;<br><b>PDBTitle:</b> crystal structure of the methanococcus jannaschii cbf52 nop10 complex                                    |
| 19 | <a href="#">c3uaiA</a>  | Alignment |  | 98.5  | 15 | <b>PDB header:</b> isomerase/chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> h/aca ribonucleoprotein complex subunit 4;<br><b>PDBTitle:</b> structure of the shq1-cbf5-nop10-gar1 complex from saccharomyces2 cerevisiae                                    |
| 20 | <a href="#">d1sgva2</a> | Alignment |  | 98.5  | 18 | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase II TruB   |
| 21 | <a href="#">d1k8wa5</a> | Alignment | not modelled  | 98.5  | 20 | <b>Fold:</b> Pseudouridine synthase<br><b>Superfamily:</b> Pseudouridine synthase<br><b>Family:</b> Pseudouridine synthase II TruB   |
| 22 | <a href="#">c1sgvA</a>  | Alignment | not modelled  | 98.4  | 20 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> trna pseudouridine synthase b;<br><b>PDBTitle:</b> structure of trna psi55 pseudouridine synthase (trub)   |
| 23 | <a href="#">c1k8wA</a>  | Alignment | not modelled  | 98.0  | 21 | <b>PDB header:</b> lyase/rna<br><b>Chain:</b> A: <b>PDB Molecule:</b> trna pseudouridine synthase b;<br><b>PDBTitle:</b> crystal structure of the e. coli pseudouridine synthase2 trub bound to a t stem-loop rna  |
| 24 | <a href="#">c1ze2B</a>  | Alignment | not modelled  | 95.4  | 18 | <b>PDB header:</b> lyase/rna<br><b>Chain:</b> B: <b>PDB Molecule:</b> trna pseudouridine synthase b;<br><b>PDBTitle:</b> conformational change of pseudouridine 55 synthase upon its2 association with rna substrate   |
| 25 | <a href="#">c2k6pA</a>  | Alignment | not modelled  | 32.2  | 11 | <b>PDB header:</b> unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein hp_1423;<br><b>PDBTitle:</b> solution structure of hypothetical protein, hp1423   |
| 26 | <a href="#">c2fo1A</a>  | Alignment | not modelled  | 19.2  | 16 | <b>PDB header:</b> gene regulation/signalling protein/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> lin-12 and glp-1 phenotype protein 1, isoform b;<br><b>PDBTitle:</b> crystal structure of the csl-notch-mastermind ternary2 complex bound to dna            |
| 27 | <a href="#">d2ysca1</a> | Alignment | not modelled  | 13.8  | 45 | <b>Fold:</b> WW domain-like<br><b>Superfamily:</b> WW domain<br><b>Family:</b> WW domain   |
| 28 | <a href="#">d1nka1</a>  | Alignment | not modelled  | 12.4  | 14 | <b>Fold:</b> Prealbumin-like<br><b>Superfamily:</b> Starch-binding domain-like<br><b>Family:</b> Rhamnogalacturonase B, RhgB, middle domain  |
| 29 | <a href="#">c3cisA</a>  | Alignment | not modelled  | 12.0  | 50 | <b>PDB header:</b> transferase/ribosomal protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> ribosomal protein l11 methyltransferase;   |

|    |                         |           |              |      |    |   |
|----|-------------------------|-----------|--------------|------|----|---|
| 29 | <a href="#">c0q3A_</a>  | Alignment | not modelled | 12.0 | 30 | <b>PDBTitle:</b> minimal recognition complex between prma and ribosomal protein l11   |
| 30 | <a href="#">d2ho2a1</a> | Alignment | not modelled | 11.7 | 42 | <b>Fold:</b> WW domain-like<br><b>Superfamily:</b> WW domain<br><b>Family:</b> WW domain  |
| 31 | <a href="#">c2jnzA_</a> | Alignment | not modelled | 11.6 | 14 | <b>PDB header:</b> unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein mj0781;<br><b>PDBTitle:</b> solution structure of a klba intein precursor from2 methanococcus jannaschii  |
| 32 | <a href="#">c1f5nA_</a> | Alignment | not modelled | 11.4 | 13 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> interferon-induced guanylate-binding protein 1;<br><b>PDBTitle:</b> human guanylate binding protein-1 in complex with the gtp2 analogue, gmppnp.                        |
| 33 | <a href="#">c3h7hA_</a> | Alignment | not modelled | 11.2 | 16 | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> transcription elongation factor spt4;<br><b>PDBTitle:</b> crystal structure of the human transcription elongation factor dsif,2 hspt4/hspt5 (176-273)                       |
| 34 | <a href="#">d1zhva1</a> | Alignment | not modelled | 9.4  | 31 | <b>Fold:</b> Ferredoxin-like<br><b>Superfamily:</b> ACT-like<br><b>Family:</b> Atu0741-like   |
| 35 | <a href="#">c1mzwB_</a> | Alignment | not modelled | 8.3  | 23 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> u4/u6 snrnp 60kda protein;<br><b>PDBTitle:</b> crystal structure of a u4/u6 snrnp complex between human2 spliceosomal cyclophilin h and a u4/u6-60k peptide                     |
| 36 | <a href="#">d2hq4a1</a> | Alignment | not modelled | 7.9  | 33 | <b>Fold:</b> PH1570-like<br><b>Superfamily:</b> PH1570-like<br><b>Family:</b> PH1570-like   |
| 37 | <a href="#">c2voiB_</a> | Alignment | not modelled | 7.8  | 27 | <b>PDB header:</b> apoptosis<br><b>Chain:</b> B: <b>PDB Molecule:</b> bh3-interacting domain death agonist p13;<br><b>PDBTitle:</b> structure of mouse a1 bound to the bid bh3-domain   |
| 38 | <a href="#">c2imzA_</a> | Alignment | not modelled | 6.6  | 14 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease pi-mtui;<br><b>PDBTitle:</b> crystal structure of mtu reca intein splicing domain  |
| 39 | <a href="#">d1t6la1</a> | Alignment | not modelled | 6.4  | 19 | <b>Fold:</b> DNA clamp<br><b>Superfamily:</b> DNA clamp<br><b>Family:</b> DNA polymerase processivity factor  |
| 40 | <a href="#">c2exuA_</a> | Alignment | not modelled | 6.2  | 16 | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> transcription initiation protein spt4/spt5;<br><b>PDBTitle:</b> crystal structure of saccharomyces cerevisiae transcription elongation2 factors spt4-spt5ngn domain         |
| 41 | <a href="#">c1tlqA_</a> | Alignment | not modelled | 6.1  | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein ypqj;<br><b>PDBTitle:</b> crystal structure of protein ypqj from bacillus subtilis, pfam duf64                                 |
| 42 | <a href="#">d1tlqa_</a> | Alignment | not modelled | 6.1  | 13 | <b>Fold:</b> YutG-like<br><b>Superfamily:</b> YutG-like<br><b>Family:</b> YutG-like   |
| 43 | <a href="#">d1k4ta3</a> | Alignment | not modelled | 5.4  | 13 | <b>Fold:</b> Eukaryotic DNA topoisomerase I, N-terminal DNA-binding fragment<br><b>Superfamily:</b> Eukaryotic DNA topoisomerase I, N-terminal DNA-binding fragment<br><b>Family:</b> Eukaryotic DNA topoisomerase I, N-terminal DNA-binding fragment |
| 44 | <a href="#">d1y9ia_</a> | Alignment | not modelled | 5.3  | 13 | <b>Fold:</b> YutG-like<br><b>Superfamily:</b> YutG-like<br><b>Family:</b> YutG-like   |
| 45 | <a href="#">c3bbnD_</a> | Alignment | not modelled | 5.3  | 13 | <b>PDB header:</b> ribosome<br><b>Chain:</b> D: <b>PDB Molecule:</b> ribosomal protein s4;<br><b>PDBTitle:</b> homology model for the spinach chloroplast 30s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome.                          |
| 46 | <a href="#">c1vs3B_</a> | Alignment | not modelled | 5.2  | 40 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> trna pseudouridine synthase a;<br><b>PDBTitle:</b> crystal structure of the trna pseudouridine synthase trua from thermus2 thermophilus hb8                                     |
| 47 | <a href="#">c2x5pA_</a> | Alignment | not modelled | 5.2  | 18 | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> fibronectin binding protein;<br><b>PDBTitle:</b> crystal structure of the streptococcus pyogenes fibronectin binding2 protein fbab-b                                      |