

# Phyre<sup>2</sup>

|               |                             |
|---------------|-----------------------------|
| Email         | i.a.kelley@imperial.ac.uk   |
| Description   | P0ACX9                      |
| Date          | Thu Jan 5 11:19:22 GMT 2012 |
| Unique Job ID | 29e0096d7847767e            |

Detailed template information

| #  | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information  |
|----|----------|--------------------|----------|------------|--------|---|
| 1  | c2jraB_  | Alignment          |          | 99.8       | 32     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B; <b>PDB Molecule:</b> protein rpa2121;<br><b>PDBTitle:</b> a novel domain-swapped solution nmr structure of protein rpa2121 from2 rhodopseudomonas palustris. northeast structural genomics target rpt6 |
| 2  | d1tlua1  | Alignment          |          | 29.5       | 16     | <b>Fold:</b> CoA-dependent acyltransferases<br><b>Superfamily:</b> CoA-dependent acyltransferases<br><b>Family:</b> Choline/Carnitine O-acyltransferase   |
| 3  | d1xl7a1  | Alignment          |          | 28.7       | 12     | <b>Fold:</b> CoA-dependent acyltransferases<br><b>Superfamily:</b> CoA-dependent acyltransferases<br><b>Family:</b> Choline/Carnitine O-acyltransferase   |
| 4  | d1qgra_  | Alignment          |          | 22.7       | 20     | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Staphylokinase/streptokinase<br><b>Family:</b> Staphylokinase/streptokinase   |
| 5  | c1q6xA_  | Alignment          |          | 17.4       | 16     | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> choline o-acetyltransferase;<br><b>PDBTitle:</b> crystal structure of rat choline acetyltransferase   |
| 6  | d1nm8a1  | Alignment          |          | 14.4       | 21     | <b>Fold:</b> CoA-dependent acyltransferases<br><b>Superfamily:</b> CoA-dependent acyltransferases<br><b>Family:</b> Choline/Carnitine O-acyltransferase   |
| 7  | c1t7qA_  | Alignment          |          | 12.7       | 21     | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> carnitine acetyltransferase;<br><b>PDBTitle:</b> crystal structure of the f565a mutant of murine carnitine2 acetyltransferase in complex with carnitine and coa   |
| 8  | d1ndba1  | Alignment          |          | 12.3       | 21     | <b>Fold:</b> CoA-dependent acyltransferases<br><b>Superfamily:</b> CoA-dependent acyltransferases<br><b>Family:</b> Choline/Carnitine O-acyltransferase   |
| 9  | c1xl8B_  | Alignment          |          | 10.0       | 12     | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> peroxisomal carnitine o-octanoyltransferase;<br><b>PDBTitle:</b> crystal structure of mouse carnitine octanoyltransferase in2 complex with octanoylcarnitine  |
| 10 | d1dcja_  | Alignment          |          | 9.8        | 19     | <b>Fold:</b> IF3-like<br><b>Superfamily:</b> SirA-like<br><b>Family:</b> SirA-like  |
| 11 | c3tq8A_  | Alignment          |          | 9.6        | 22     | <b>PDB header:</b> oxidoreductase/oxidoreductase inhibitor<br><b>Chain:</b> A; <b>PDB Molecule:</b> dihydrofolate reductase;<br><b>PDBTitle:</b> structure of the dihydrofolate reductase (fola) from coxiella burnetii2 in complex with trimethoprim                               |

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|----|-------------------------|--|-----|----|--|
| 12 | <a href="#">c3lydA</a>  |  | 9.3 | 9  | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of putative uncharacterized protein from jonesia2 denitrificans   |
| 13 | <a href="#">c2fy2A</a>  |  | 9.0 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> choline o-acetyltransferase;<br><b>PDBTitle:</b> structures of ligand bound human choline acetyltransferase2 provide insight into regulation of acetylcholine synthesis  |
| 14 | <a href="#">c3f0uX</a>  |  | 8.5 | 10 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> X: <b>PDB Molecule:</b> trimethoprim-sensitive dihydrofolate reductase;<br><b>PDBTitle:</b> staphylococcus aureus f98y mutant dihydrofolate reductase2 complexed with nadph and 2,4-diamino-5-[3-(3-methoxy-5-phenylphenyl)but-1-ynyl]-6-methylpyrimidine |
| 15 | <a href="#">d1kv7a2</a> |  | 8.1 | 12 | <b>Fold:</b> Cupredoxin-like<br><b>Superfamily:</b> Cupredoxins<br><b>Family:</b> Multidomain cupredoxins  |
| 16 | <a href="#">c2xzmW</a>  |  | 8.1 | 16 | <b>PDB header:</b> ribosome<br><b>Chain:</b> W: <b>PDB Molecule:</b> 40s ribosomal protein s4;<br><b>PDBTitle:</b> crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 1                 |
| 17 | <a href="#">c3iz6D</a>  |  | 7.5 | 24 | <b>PDB header:</b> ribosome<br><b>Chain:</b> D: <b>PDB Molecule:</b> 40s ribosomal protein s4 (s4e);<br><b>PDBTitle:</b> localization of the small subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome  |
| 18 | <a href="#">d2zjr31</a> |  | 7.0 | 27 | <b>Fold:</b> L35p-like<br><b>Superfamily:</b> L35p-like<br><b>Family:</b> Ribosomal protein L35p   |
| 19 | <a href="#">d1v10a2</a> |  | 6.5 | 13 | <b>Fold:</b> Cupredoxin-like<br><b>Superfamily:</b> Cupredoxins<br><b>Family:</b> Multidomain cupredoxins  |
| 20 | <a href="#">c2hs1B</a>  |  | 5.9 | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative peptidase m23;<br><b>PDBTitle:</b> crystal structure of putative peptidase m23 from2 pseudomonas aeruginosa, new york structural genomics3 consortium   |
| 21 | <a href="#">d1u0la1</a> |  | 5.9 | 13 | <b>Fold:</b> OB-fold<br><b>Superfamily:</b> Nucleic acid-binding proteins<br><b>Family:</b> Cold shock DNA-binding domain-like   |
| 22 | <a href="#">c3ia5A</a>  |  | 5.5 | 25 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dihydrofolate reductase;<br><b>PDBTitle:</b> moritella profunda dihydrofolate reductase (dhfr)  |