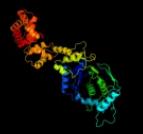


# Phyre<sup>2</sup>

|               |                                |
|---------------|--------------------------------|
| Email         | i.a.kelley@imperial.ac.uk      |
| Description   | P04805                         |
| Date          | Thu Jan 5 10:58:21 GMT<br>2012 |
| Unique Job ID | 7d0698c85c8d0f6f               |

Detailed template information

| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information   |
|----|-------------------------|---|---|------------|--------|--|
| 1  | <a href="#">c2cfoA_</a> |    |    | 100.0      | 41     | <b>PDB header:</b> ligase<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutamyl-tRNA synthetase;<br><b>PDBTitle:</b> non-discriminating glutamyl-tRNA synthetase from2 thermosynechococcus elongatus in complex with glu   |
| 2  | <a href="#">c3al0C_</a> |    |    | 100.0      | 36     | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> C; <b>PDB Molecule:</b> glutamyl-tRNA(gln) amidotransferase subunit c, glutamyl-<br><b>PDBTitle:</b> crystal structure of the glutamine transamidosome from thermotoga2 maritima in the glutamylation state.                  |
| 3  | <a href="#">c2ja2A_</a> |    |    | 100.0      | 37     | <b>PDB header:</b> ligase<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutamyl-tRNA synthetase;<br><b>PDBTitle:</b> mycobacterium tuberculosis glutamyl-tRNA synthetase   |
| 4  | <a href="#">c3afhA_</a> |    |   | 100.0      | 36     | <b>PDB header:</b> ligase<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutamyl-tRNA synthetase 2;<br><b>PDBTitle:</b> crystal structure of thermotoga maritima nondiscriminating glutamyl-2 tRNA synthetase in complex with a glutamyl-AMP analog                               |
| 5  | <a href="#">c1g59A_</a> |  |  | 100.0      | 37     | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutamyl-tRNA synthetase;<br><b>PDBTitle:</b> glutamyl-tRNA synthetase complexed with tRNA(glu).  |
| 6  | <a href="#">c2o5rA_</a> |  |  | 100.0      | 40     | <b>PDB header:</b> ligase<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutamyl-tRNA synthetase 1;<br><b>PDBTitle:</b> crystal structure of glutamyl-tRNA synthetase 1 (ec 6.1.1.17)2 (glutamate-tRNA ligase 1) (glurs 1) (tm1351) from thermotoga maritima3 at 2.5 a resolution |
| 7  | <a href="#">d1j09a2</a> |  |  | 100.0      | 41     | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 8  | <a href="#">d1gtr42</a> |  |  | 100.0      | 23     | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 9  | <a href="#">d1nzia_</a> |  |  | 100.0      | 36     | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 10 | <a href="#">c2hz7A_</a> |  |  | 100.0      | 26     | <b>PDB header:</b> ligase<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutaminyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of the glutaminyl-tRNA synthetase from2 deinococcus radiodurans   |
| 11 | <a href="#">c1exdA_</a> |  |  | 100.0      | 23     | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> A; <b>PDB Molecule:</b> glutaminyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of a tight-binding glutamine tRNA bound2 to glutamine aminoacyl tRNA synthetase   |

|    |                         |  |              |       |    |   |
|----|-------------------------|--|--------------|-------|----|---|
| 12 | <a href="#">c1irxA</a>  |  |              | 100.0 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> lysyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of class I lysyl-tRNA synthetase  |
| 13 | <a href="#">c3aiIA</a>  |  |              | 100.0 | 29 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> glutamyl-tRNA synthetase;<br><b>PDBTitle:</b> archaeal non-discriminating glutamyl-tRNA synthetase from <i>Methanothermobacter thermophilic</i>                                      |
| 14 | <a href="#">d1f7ua2</a> |  |              | 100.0 | 15 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 15 | <a href="#">c1u0bB</a>  |  |              | 100.0 | 15 | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> B: <b>PDB Molecule:</b> cysteinyl tRNA;<br><b>PDBTitle:</b> crystal structure of cysteinyl-tRNA synthetase binary2 complex with tRNACys  |
| 16 | <a href="#">d1li5a2</a> |  |              | 100.0 | 16 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 17 | <a href="#">d2d5ba2</a> |  |              | 100.0 | 17 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 18 | <a href="#">c3sp1B</a>  |  |              | 100.0 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> cysteinyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of cysteinyl-tRNA synthetase (cySS) from <i>Borrelia burgdorferi</i>  |
| 19 | <a href="#">d1irxa2</a> |  |              | 100.0 | 17 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 20 | <a href="#">d1pfva2</a> |  |              | 100.0 | 14 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 21 | <a href="#">d1j09a1</a> |  | not modelled | 100.0 | 29 | <b>Fold:</b> An anticodon-binding domain of class I aminoacyl-tRNA synthetases<br><b>Superfamily:</b> An anticodon-binding domain of class I aminoacyl-tRNA synthetases<br><b>Family:</b> C-terminal domain of glutamyl-tRNA synthetase (GluRS)         |
| 22 | <a href="#">c3tqoA</a>  |  | not modelled | 100.0 | 15 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> cysteinyl-tRNA synthetase;<br><b>PDBTitle:</b> structure of the cysteinyl-tRNA synthetase (cySS) from <i>Coxiella burnetii</i> .   |
| 23 | <a href="#">c3c8zB</a>  |  | not modelled | 99.9  | 19 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> cysteinyl-tRNA synthetase;<br><b>PDBTitle:</b> the 1.6 Å crystal structure of mshc: the rate limiting enzyme in the mycothiol biosynthetic pathway                                   |
| 24 | <a href="#">c3fnrA</a>  |  | not modelled | 99.9  | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> arginyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of putative arginyl tRNA synthetase from <i>Campylobacter jejuni</i>   |
| 25 | <a href="#">c2x1IC</a>  |  | not modelled | 99.9  | 13 | <b>PDB header:</b> ligase<br><b>Chain:</b> C: <b>PDB Molecule:</b> methionyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of <i>Mycobacterium smegmatis</i> methionyl-tRNA synthetase in complex with methionine and adenosine                |
| 26 | <a href="#">c1woyA</a>  |  | not modelled | 99.9  | 22 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of methionyl tRNA synthetase Y225F mutant from <i>Thermus thermophilus</i>  |
| 27 | <a href="#">c2ct8A</a>  |  | not modelled | 99.9  | 16 | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-tRNA synthetase;<br><b>PDBTitle:</b> crystal structure of <i>Aquifex aeolicus</i> methionyl-tRNA synthetase complexed with tRNA(met) and methionyl-adenylate3 analogue |
| 28 | <a href="#">d1ivsa4</a> |  | not modelled | 99.9  | 18 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase   |

|    |                         |           |              |      |   |
|----|-------------------------|-----------|--------------|------|---|
|    |                         |           |              |      | <b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 29 | <a href="#">d1rqga2</a> | Alignment | not modelled | 99.9 | 15<br><b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 30 | <a href="#">c1pfuA</a>  | Alignment | not modelled | 99.9 | 16<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna synthetase;<br><b>PDBTitle:</b> methionyl-trna synthetase from escherichia coli complexed2 with methionine phosphinate  |
| 31 | <a href="#">c3kfIA</a>  | Alignment | not modelled | 99.9 | 14<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna synthetase;<br><b>PDBTitle:</b> leishmania major methionyl-trna synthetase in complex with2 methionyladenylate and pyrophosphate  |
| 32 | <a href="#">d1ilea3</a> | Alignment | not modelled | 99.8 | 17<br><b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 33 | <a href="#">d1ffya3</a> | Alignment | not modelled | 99.8 | 19<br><b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 34 | <a href="#">c1rqgA</a>  | Alignment | not modelled | 99.8 | 20<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna synthetase;<br><b>PDBTitle:</b> methionyl-trna synthetase from pyrococcus abyssi  |
| 35 | <a href="#">d1irxa1</a> | Alignment | not modelled | 99.8 | 12<br><b>Fold:</b> An anticodon-binding domain of class I aminoacyl-tRNA synthetases<br><b>Superfamily:</b> An anticodon-binding domain of class I aminoacyl-tRNA synthetases<br><b>Family:</b> C-terminal domain of class I lysyl-tRNA synthetase                                  |
| 36 | <a href="#">d1iq0a2</a> | Alignment | not modelled | 99.8 | 17<br><b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 37 | <a href="#">d1h3na3</a> | Alignment | not modelled | 99.8 | 22<br><b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 38 | <a href="#">c2zufA</a>  | Alignment | not modelled | 99.7 | 22<br><b>PDB header:</b> ligase/rna<br><b>Chain:</b> A: <b>PDB Molecule:</b> arginyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of pyrococcus horikoshii arginyl-trna2 synthetase complexed with trna(arg)  |
| 39 | <a href="#">c1gaxB</a>  | Alignment | not modelled | 99.7 | 24<br><b>PDB header:</b> ligase/rna<br><b>Chain:</b> B: <b>PDB Molecule:</b> valyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of thermus thermophilus valyl-trna2 synthetase complexed with trna(val) and valyl-adenylate3 analogue                                     |
| 40 | <a href="#">c1ileA</a>  | Alignment | not modelled | 99.7 | 23<br><b>PDB header:</b> aminoacyl-trna synthetase<br><b>Chain:</b> A: <b>PDB Molecule:</b> isoleucyl-trna synthetase;<br><b>PDBTitle:</b> isoleucyl-trna synthetase  |
| 41 | <a href="#">c1iq0A</a>  | Alignment | not modelled | 99.6 | 16<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> arginyl-trna synthetase;<br><b>PDBTitle:</b> thermus thermophilus arginyl-trna synthetase  |
| 42 | <a href="#">c1qu2A</a>  | Alignment | not modelled | 99.6 | 20<br><b>PDB header:</b> ligase/rna<br><b>Chain:</b> A: <b>PDB Molecule:</b> isoleucyl-trna synthetase;<br><b>PDBTitle:</b> insights into editing from an ile-trna synthetase structure2 with trna(ile) and mupirocin   |
| 43 | <a href="#">c1f7uA</a>  | Alignment | not modelled | 99.6 | 22<br><b>PDB header:</b> ligase/rna<br><b>Chain:</b> A: <b>PDB Molecule:</b> arginyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of the arginyl-trna synthetase complexed with the2 trna(arg) and l-arg  |
| 44 | <a href="#">c1wz2B</a>  | Alignment | not modelled | 99.6 | 28<br><b>PDB header:</b> ligase/rna<br><b>Chain:</b> B: <b>PDB Molecule:</b> leucyl-trna synthetase;<br><b>PDBTitle:</b> the crystal structure of leucyl-trna synthetase and trna(leucine)2 complex   |
| 45 | <a href="#">c1wkbA</a>  | Alignment | not modelled | 99.5 | 29<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> leucyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of leucyl-trna synthetase from the2 archaeon pyrococcus horikoshii reveals a novel editing3 domain orientation                               |
| 46 | <a href="#">c1obhA</a>  | Alignment | not modelled | 99.3 | 27<br><b>PDB header:</b> synthetase<br><b>Chain:</b> A: <b>PDB Molecule:</b> leucyl-trna synthetase;<br><b>PDBTitle:</b> leucyl-trna synthetase from thermus thermophilus complexed2 with a pre-transfer editing substrate analogue in both3 synthetic active site and editing site |
| 47 | <a href="#">c2g36A</a>  | Alignment | not modelled | 99.0 | 23<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase (ec 6.1.1.2)2 (tryptophan-trna ligase)(trprs) (tm0492) from thermotoga maritima at3.25 a resolution    |
| 48 | <a href="#">c2cybA</a>  | Alignment | not modelled | 98.8 | 21<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tyrosyl-trna synthetase complexed with2 l-tyrosine from archaeoglobus fulgidus   |
| 49 | <a href="#">c2j5bA</a>  | Alignment | not modelled | 98.8 | 22<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> structure of the tyrosyl trna synthetase from acanthamoeba2 polyphaga mimivirus complexed with tyrosynol  |
| 50 | <a href="#">c2el7A</a>  | Alignment | not modelled | 98.6 | 19<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase from thermus2 thermophilus   |
| 51 | <a href="#">c2cyaA</a>  | Alignment | not modelled | 98.5 | 18<br><b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tyrosyl-trna synthetase from aeropyrum pernix  |
| 52 | <a href="#">c3jxeB</a>  | Alignment | not modelled | 98.5 | 14<br><b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of pyrococcus horikoshii tryptophanyl-trna2 synthetase in complex with trpamp  |
| 53 | <a href="#">c3hzrD</a>  | Alignment | not modelled | 98.5 | 16<br><b>PDB header:</b> ligase<br><b>Chain:</b> D: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> tryptophanyl-trna synthetase homolog from entamoeba histolytica  |

|    |                         |  |           |              |      |    |  |
|----|-------------------------|--|-----------|--------------|------|----|--|
| 54 | <a href="#">c3focB_</a> |  | Alignment | not modelled | 98.5 | 15 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> tryptophanyl-trna synthetase from giardia lamblia   |
| 55 | <a href="#">c3a05A_</a> |  | Alignment | not modelled | 98.4 | 21 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase from2 hyperthermophilic archaeon, aeropyrum pernix k1 complex3 with tryptophan                      |
| 56 | <a href="#">c3m5wB_</a> |  | Alignment | not modelled | 98.3 | 15 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase from2 campylobacter jejuni  |
| 57 | <a href="#">c3prhB_</a> |  | Alignment | not modelled | 98.3 | 20 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> tryptophanyl-trna synthetase val144pro mutant from b. subtilis  |
| 58 | <a href="#">c2yy5C_</a> |  | Alignment | not modelled | 98.1 | 16 | <b>PDB header:</b> ligase<br><b>Chain:</b> C: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase from mycoplasma2 pneumoniae   |
| 59 | <a href="#">c2quiB_</a> |  | Alignment | not modelled | 98.1 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structures of human tryptophanyl-trna synthetase in2 complex with tryptophanamide and atp   |
| 60 | <a href="#">c3p0jD_</a> |  | Alignment | not modelled | 98.1 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> D: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> leishmania major tyrosyl-trna synthetase in complex with tyrosinol,2 triclinic crystal form 1  |
| 61 | <a href="#">d1i6la_</a> |  | Alignment | not modelled | 98.1 | 15 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 62 | <a href="#">c1yi8C_</a> |  | Alignment | not modelled | 98.0 | 20 | <b>PDB header:</b> ligase<br><b>Chain:</b> C: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl trna synthetase ii from deinococcus2 radiourans in complex with l-trp   |
| 63 | <a href="#">c2cycB_</a> |  | Alignment | not modelled | 97.9 | 17 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tyrosyl-trna synthetase complexed with l-tyrosine2 from pyrococcus horikoshii   |
| 64 | <a href="#">c2janD_</a> |  | Alignment | not modelled | 97.8 | 16 | <b>PDB header:</b> ligase<br><b>Chain:</b> D: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> tyrosyl-trna synthetase from mycobacterium tuberculosis in2 unliganded state   |
| 65 | <a href="#">d1h3fa1</a> |  | Alignment | not modelled | 97.8 | 17 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 66 | <a href="#">c2ip1A_</a> |  | Alignment | not modelled | 97.7 | 13 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure analysis of s. cerevisiae tryptophanyl trna2 synthetase   |
| 67 | <a href="#">d1r6ta2</a> |  | Alignment | not modelled | 97.6 | 11 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 68 | <a href="#">c2dlcX_</a> |  | Alignment | not modelled | 97.6 | 14 | <b>PDB header:</b> ligase/trna<br><b>Chain:</b> X: <b>PDB Molecule:</b> tyrosyl-trna synthetase, cytoplasmic;<br><b>PDBTitle:</b> crystal structure of the ternary complex of yeast tyrosyl-trna2 synthetase   |
| 69 | <a href="#">c1h3eA_</a> |  | Alignment | not modelled | 97.5 | 22 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> tyrosyl-trna synthetase from thermus thermophilus complexed2 with wild-type tRNAtryr(gua) and with atp and tyrosinol                                       |
| 70 | <a href="#">d2ts1a_</a> |  | Alignment | not modelled | 97.3 | 14 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 71 | <a href="#">c2ts1A_</a> |  | Alignment | not modelled | 97.3 | 14 | <b>PDB header:</b> ligase (synthetase)<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> structure of tyrosyl-tRNA synthetase refined at 2.3 angstroms2 resolution. Interaction of the enzyme with the tyrosyl adenylate3 intermediate |
| 72 | <a href="#">c1jiIA_</a> |  | Alignment | not modelled | 97.3 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of s. aureus tyrr in complex with sb-219383  |
| 73 | <a href="#">d1jila_</a> |  | Alignment | not modelled | 97.1 | 13 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 74 | <a href="#">c1x8xA_</a> |  | Alignment | not modelled | 97.0 | 17 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> tyrosyl tRNA synthetase from e.coli complexed with tyrosine  |
| 75 | <a href="#">c3hv0A_</a> |  | Alignment | not modelled | 96.9 | 15 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> tryptophanyl-trna synthetase from cryptosporidium parvum  |
| 76 | <a href="#">d1n3la_</a> |  | Alignment | not modelled | 96.7 | 14 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain  |
| 77 | <a href="#">c3n9iA_</a> |  | Alignment | not modelled | 96.4 | 17 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase from yersinia pestis2 c092  |
| 78 | <a href="#">c3sz3A_</a> |  | Alignment | not modelled | 96.1 | 15 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of tryptophanyl-trna synthetase from vibrio cholerae2 with an endogenous tryptophan   |
| 79 | <a href="#">c1q11A_</a> |  | Alignment | not modelled | 95.8 | 15 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of an active fragment of human tyrosyl-  |

|     |                         |           |              |      |    |   |
|-----|-------------------------|-----------|--------------|------|----|---|
|     |                         |           |              |      |    | trna2 synthetase with tyrosinol   |
| 80  | <a href="#">c2rkjM_</a> | Alignment | not modelled | 95.7 | 17 | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> M: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> cocrystal structure of a tyrosyl-trna synthetase splicing2 factor with a group i intron rna   |
| 81  | <a href="#">d1j1ua_</a> | Alignment | not modelled | 95.6 | 12 | <b>Fold:</b> Adenine nucleotide alpha hydrolase-like<br><b>Superfamily:</b> Nucleotidyl transferase<br><b>Family:</b> Class I aminoacyl-tRNA synthetases (RS), catalytic domain   |
| 82  | <a href="#">c3i05B_</a> | Alignment | not modelled | 95.4 | 8  | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> tryptophanyl-trna synthetase from trypanosoma brucei   |
| 83  | <a href="#">c1r6uB_</a> | Alignment | not modelled | 92.9 | 10 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tryptophanyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of an active fragment of human tryptophanyl-trna2 synthetase with cytokine activity                                  |
| 84  | <a href="#">c2pidB_</a> | Alignment | not modelled | 53.6 | 13 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> tyrosyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of human mitochondrial tyrosyl-trna synthetase in2 complex with an adenylate analog                                       |
| 85  | <a href="#">d2p10a1</a> | Alignment | not modelled | 52.5 | 15 | <b>Fold:</b> TIM beta/alpha-barrel<br><b>Superfamily:</b> Phosphoenolpyruvate/pyruvate domain<br><b>Family:</b> MII9387-like  |
| 86  | <a href="#">d1w7ca1</a> | Alignment | not modelled | 36.9 | 17 | <b>Fold:</b> Supersandwich<br><b>Superfamily:</b> Amine oxidase catalytic domain<br><b>Family:</b> Amine oxidase catalytic domain   |
| 87  | <a href="#">c2p10D_</a> | Alignment | not modelled | 35.6 | 15 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> D: <b>PDB Molecule:</b> mII9387 protein;<br><b>PDBTitle:</b> crystal structure of a putative phosphonopyruvate hydrolase (mII9387)2 from mesorhizobium loti maff303099 at 2.15 a resolution                   |
| 88  | <a href="#">d1d6za1</a> | Alignment | not modelled | 35.2 | 33 | <b>Fold:</b> Supersandwich<br><b>Superfamily:</b> Amine oxidase catalytic domain<br><b>Family:</b> Amine oxidase catalytic domain   |
| 89  | <a href="#">c1n9eA_</a> | Alignment | not modelled | 33.9 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> lysyl oxidase;<br><b>PDBTitle:</b> crystal structure of pichia pastoris lysyl oxidase pplo   |
| 90  | <a href="#">c1lw7A_</a> | Alignment | not modelled | 33.6 | 8  | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> transcriptional regulator nadr;<br><b>PDBTitle:</b> nadr protein from haemophilus influenzae  |
| 91  | <a href="#">c2pncB_</a> | Alignment | not modelled | 33.3 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> copper amine oxidase, liver isozyme;<br><b>PDBTitle:</b> crystal structure of bovine plasma copper-containing amine oxidase in2 complex with clonidine                           |
| 92  | <a href="#">c1w7cA_</a> | Alignment | not modelled | 33.0 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> lysyl oxidase;<br><b>PDBTitle:</b> pplo at 1.23 angstroms  |
| 93  | <a href="#">c1h3oA_</a> | Alignment | not modelled | 31.8 | 13 | <b>PDB header:</b> transcription/tbp-associated factors<br><b>Chain:</b> A: <b>PDB Molecule:</b> transcription initiation factor tfiId 135 kda<br><b>PDBTitle:</b> crystal structure of the human taf4-taf122 (tafii135-tafii20) complex                    |
| 94  | <a href="#">d1h3oa_</a> | Alignment | not modelled | 31.8 | 13 | <b>Fold:</b> Histone-fold<br><b>Superfamily:</b> Histone-fold<br><b>Family:</b> TBP-associated factors, TAFs  |
| 95  | <a href="#">d1w6ga1</a> | Alignment | not modelled | 30.0 | 33 | <b>Fold:</b> Supersandwich<br><b>Superfamily:</b> Amine oxidase catalytic domain<br><b>Family:</b> Amine oxidase catalytic domain   |
| 96  | <a href="#">c1ui7A_</a> | Alignment | not modelled | 29.9 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phenylethylamine oxidase;<br><b>PDBTitle:</b> site-directed mutagenesis of his433 involved in binding of2 copper ion in arthrobacter globiformis amine oxidase                   |
| 97  | <a href="#">c1ks1A_</a> | Alignment | not modelled | 29.4 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> copper amine oxidase;<br><b>PDBTitle:</b> crystal structure of a eukaryotic (pea seedling) copper-containing2 amine oxidase at 2.2a resolution                                   |
| 98  | <a href="#">c3higB_</a> | Alignment | not modelled | 28.9 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> amiloride-sensitive amine oxidase;<br><b>PDBTitle:</b> crystal structure of human diamine oxidase in complex with the2 inhibitor berenil   |
| 99  | <a href="#">c1d6uB_</a> | Alignment | not modelled | 26.8 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> copper amine oxidase;<br><b>PDBTitle:</b> crystal structure of e. coli amine oxidase anaerobically reduced with2 beta-phenylethylamine   |
| 100 | <a href="#">c3pgbA_</a> | Alignment | not modelled | 26.1 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of aspergillus nidulans amine oxidase  |
| 101 | <a href="#">c1ekmC_</a> | Alignment | not modelled | 25.9 | 28 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> C: <b>PDB Molecule:</b> copper amine oxidase;<br><b>PDBTitle:</b> crystal structure at 2.5 a resolution of zinc-substituted2 copper amine oxidase of hansenula polymorpha expressed in3 escherichia coli |
| 102 | <a href="#">c3loyB_</a> | Alignment | not modelled | 25.7 | 33 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> copper amine oxidase;<br><b>PDBTitle:</b> crystal structure of a copper-containing benzylamine oxidase from2 hansenula polymorpha  |
| 103 | <a href="#">d2oqeal</a> | Alignment | not modelled | 25.1 | 28 | <b>Fold:</b> Supersandwich<br><b>Superfamily:</b> Amine oxidase catalytic domain<br><b>Family:</b> Amine oxidase catalytic domain   |
| 104 | <a href="#">d1w2za1</a> | Alignment | not modelled | 24.6 | 33 | <b>Fold:</b> Supersandwich<br><b>Superfamily:</b> Amine oxidase catalytic domain<br><b>Family:</b> Amine oxidase catalytic domain   |