

# Phyre<sup>2</sup>

|               |                             |
|---------------|-----------------------------|
| Email         | I.a.kelley@imperial.ac.uk   |
| Description   | P0A6I9                      |
| Date          | Thu Jan 5 11:03:14 GMT 2012 |
| Unique Job ID | 5b8c8dd593487207            |

Detailed template information

| #  | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information  |
|----|----------|--------------------|----------|------------|--------|---|
| 1  | d1vhta_  | Alignment          |          | 100.0      | 100    | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 2  | c2f6rA_  | Alignment          |          | 100.0      | 23     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> bifunctional coenzyme a synthase;<br><b>PDBTitle:</b> crystal structure of bifunctional coenzyme a synthase (coa synthase):2 (18044849) from mus musculus at 1.70 a resolution        |
| 3  | d1jiva_  | Alignment          |          | 100.0      | 47     | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 4  | d1uf9a_  | Alignment          |          | 99.9       | 27     | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 5  | c2grjH_  | Alignment          |          | 99.9       | 25     | <b>PDB header:</b> transferase<br><b>Chain:</b> H: <b>PDB Molecule:</b> dephospho-coa kinase;<br><b>PDBTitle:</b> crystal structure of dephospho-coa kinase (ec 2.7.1.24) (dephosphocoenzyme a kinase) (tm1387) from thermotoga maritima at 2.60 a resolution |
| 6  | c2if2C_  | Alignment          |          | 99.9       | 29     | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> dephospho-coa kinase;<br><b>PDBTitle:</b> crystal structure of the putative dephospho-coa kinase from aquifex2 aeolicus, northeast structural genomics target qr72.                   |
| 7  | c3h0kA_  | Alignment          |          | 99.9       | 19     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> upf0200 protein sso1041;<br><b>PDBTitle:</b> crystal structure of an adenylated kinase related protein from2 sulfolobus solfataricus to 3.25a               |
| 8  | d1dekA_  | Alignment          |          | 99.8       | 14     | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 9  | d1q3ta_  | Alignment          |          | 99.7       | 18     | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 10 | c3akcA_  | Alignment          |          | 99.7       | 19     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> cytidylate kinase;<br><b>PDBTitle:</b> crystal structure of cmp kinase in complex with cdp and adp from2 thermus thermophilus hb8   |
| 11 | d1zaka1  | Alignment          |          | 99.7       | 17     | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |

|    |                         |  |              |      |    |   |
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| 12 | <a href="#">c2xb4A</a>  |  |              | 99.7 | 23 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> crystal structures of zinc containing adenylate kinase from2 desulfovibrio gigas  |
| 13 | <a href="#">c3tr0A</a>  |  |              | 99.7 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> guanylate kinase;<br><b>PDBTitle:</b> structure of guanylate kinase (gmk) from coxiella burnetii  |
| 14 | <a href="#">d2cdna1</a> |  |              | 99.7 | 21 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 15 | <a href="#">d1zinal</a> |  |              | 99.7 | 15 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 16 | <a href="#">c2pbrB</a>  |  |              | 99.7 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> thymidylate kinase;<br><b>PDBTitle:</b> crystal structure of thymidylate kinase (aq_969) from aquifex aeolicus2 vf5   |
| 17 | <a href="#">c1s3gA</a>  |  |              | 99.7 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> crystal structure of adenylate kinase from bacillus2 globisporus  |
| 18 | <a href="#">c1zakB</a>  |  |              | 99.7 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> adenylate kinase from maize in complex with the inhibitor2 p1,p5-bis(adenosine-5')pentaphosphate (ap5a)                 |
| 19 | <a href="#">c1znyA</a>  |  |              | 99.7 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> guanylate kinase;<br><b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis guanylate kinase in2 complex with gdp                                   |
| 20 | <a href="#">c2eu8B</a>  |  |              | 99.7 | 19 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> crystal structure of a thermostable mutant of bacillus2 subtilis adenylate kinase (q199r)                               |
| 21 | <a href="#">d1znwai</a> |  | not modelled | 99.7 | 16 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 22 | <a href="#">d1s3gal</a> |  | not modelled | 99.7 | 17 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 23 | <a href="#">d1p3ja1</a> |  | not modelled | 99.7 | 17 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 24 | <a href="#">c1zuiA</a>  |  | not modelled | 99.7 | 23 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> shikimate kinase;<br><b>PDBTitle:</b> structural basis for shikimate-binding specificity of helicobacter2 pylori shikimate kinase                             |
| 25 | <a href="#">d1ak2a1</a> |  | not modelled | 99.7 | 15 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 26 | <a href="#">c2h92C</a>  |  | not modelled | 99.7 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> C; <b>PDB Molecule:</b> cytidylate kinase;<br><b>PDBTitle:</b> crystal structure of staphylococcus aureus cytidine2 monophosphate kinase in complex with cytidine-5'-3' monophosphate |
| 27 | <a href="#">d1ckeaa</a> |  | not modelled | 99.7 | 17 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases                                     |
| 28 | <a href="#">c3cm0A</a>  |  | not modelled | 99.6 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> crystal structure of adenylate kinase from thermus2   |

|    |                         |           |              |      |  |
|----|-------------------------|-----------|--------------|------|--|
|    |                         |           |              |      | thermophilus hb8   |
| 29 | <a href="#">c2ak2A</a>  | Alignment | not modelled | 99.6 | 20<br><b>PDB header:</b> phosphotransferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> adenylate kinase isoenzyme-2;<br><b>PDBTitle:</b> adenylate kinase isoenzyme-2  |
| 30 | <a href="#">d1akyA1</a> | Alignment | not modelled | 99.6 | 14<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 31 | <a href="#">d1e6ca</a>  | Alignment | not modelled | 99.6 | 21<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Shikimate kinase (AroK)  |
| 32 | <a href="#">c3r8cB</a>  | Alignment | not modelled | 99.6 | 19<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> cytidylate kinase;<br><b>PDBTitle:</b> crystal structure of cytidylate kinase (cmk) from mycobacterium2 abscessus  |
| 33 | <a href="#">d1e4val</a> | Alignment | not modelled | 99.6 | 15<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 34 | <a href="#">d1ukza</a>  | Alignment | not modelled | 99.6 | 15<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 35 | <a href="#">c2ak3B</a>  | Alignment | not modelled | 99.6 | 18<br><b>PDB header:</b> transferase (phosphotransferase)<br><b>Chain:</b> B: <b>PDB Molecule:</b> adenylate kinase isoenzyme-3;<br><b>PDBTitle:</b> the three-dimensional structure of the complex between2 mitochondrial matrix adenylate kinase and its substrate3 amp at 1.85 angstroms resolution |
| 36 | <a href="#">c3ch4B</a>  | Alignment | not modelled | 99.6 | 14<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> phosphomevalonate kinase;<br><b>PDBTitle:</b> the crystal structure of human phosphomavelonate kinase at2 1.8 a resolution   |
| 37 | <a href="#">c2bwjC</a>  | Alignment | not modelled | 99.6 | 18<br><b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> adenylate kinase 5;<br><b>PDBTitle:</b> structure of adenylate kinase 5  |
| 38 | <a href="#">clankA</a>  | Alignment | not modelled | 99.6 | 15<br><b>PDB header:</b> transferase(phosphotransferase)<br><b>Chain:</b> A: <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> the closed conformation of a highly flexible protein: the2 structure of e. coli adenylate kinase with bound amp and3 amppnp                                    |
| 39 | <a href="#">c2ar7A</a>  | Alignment | not modelled | 99.6 | 15<br><b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> adenylate kinase 4;<br><b>PDBTitle:</b> crystal structure of human adenylate kinase 4, ak4   |
| 40 | <a href="#">c2rh5B</a>  | Alignment | not modelled | 99.6 | 18<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> structure of apo adenylate kinase from aquifex aeolicus  |
| 41 | <a href="#">d1s96a</a>  | Alignment | not modelled | 99.6 | 13<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 42 | <a href="#">d1uj2a</a>  | Alignment | not modelled | 99.6 | 16<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Phosphoribulokinase/pantothenate kinase  |
| 43 | <a href="#">d3adka</a>  | Alignment | not modelled | 99.6 | 14<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 44 | <a href="#">c3akyA</a>  | Alignment | not modelled | 99.6 | 16<br><b>PDB header:</b> adenylate kinase<br><b>Chain:</b> A: <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> stability, activity and structure of adenylate kinase2 mutants  |
| 45 | <a href="#">c3tlxA</a>  | Alignment | not modelled | 99.6 | 15<br><b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> adenylate kinase 2;<br><b>PDBTitle:</b> crystal structure of pf10_0086, adenylate kinase from plasmodium2 falciparum   |
| 46 | <a href="#">d1teva</a>  | Alignment | not modelled | 99.6 | 17<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 47 | <a href="#">d1qf9a</a>  | Alignment | not modelled | 99.6 | 19<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 48 | <a href="#">d1viaa</a>  | Alignment | not modelled | 99.6 | 19<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Shikimate kinase (AroK)  |
| 49 | <a href="#">c2ccjA</a>  | Alignment | not modelled | 99.6 | 12<br><b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> thymidylate kinase;<br><b>PDBTitle:</b> crystal structure of s. aureus thymidylate kinase complexed2 with thymidine monophosphate  |
| 50 | <a href="#">c1ueiB</a>  | Alignment | not modelled | 99.5 | 16<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> uridine-cytidine kinase 2;<br><b>PDBTitle:</b> crystal structure of human uridine-cytidine kinase 22 complexed with a feedback-inhibitor, utp  |
| 51 | <a href="#">c3asyB</a>  | Alignment | not modelled | 99.5 | 19<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> uridine kinase;<br><b>PDBTitle:</b> ligand-free structure of uridine kinase from thermus thermophilus hb8  |
| 52 | <a href="#">c2pt5D</a>  | Alignment | not modelled | 99.5 | 21<br><b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> shikimate kinase;<br><b>PDBTitle:</b> crystal structure of shikimate kinase (aq_2177) from aquifex aeolicus2 vf5   |
| 53 | <a href="#">d4tmka</a>  | Alignment | not modelled | 99.5 | 18<br><b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 54 | <a href="#">c2ql6H</a>  | Alignment | not modelled | 99.5 | 17<br><b>PDB header:</b> signaling protein,transferase<br><b>Chain:</b> H: <b>PDB Molecule:</b> nicotinamide riboside kinase 1;  |

|    |                         |           |              |      |  |
|----|-------------------------|-----------|--------------|------|--|
|    |                         |           |              |      | <b>PDBTitle:</b> human nicotinamide riboside kinase (nrk1)   |
| 55 | <a href="#">d1gkya</a>  | Alignment | not modelled | 99.5 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 56 | <a href="#">c3be4A</a>  | Alignment | not modelled | 99.5 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> crystal structure of cryptosporidium parvum adenylate kinase cgd5_3360   |
| 57 | <a href="#">d1knqa</a>  | Alignment | not modelled | 99.5 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Gluconate kinase   |
| 58 | <a href="#">c3hdTB</a>  | Alignment | not modelled | 99.5 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative kinase;<br><b>PDBTitle:</b> crystal structure of putative kinase from clostridium symbiosum atcc2 14940   |
| 59 | <a href="#">d2ak3a1</a> | Alignment | not modelled | 99.5 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 60 | <a href="#">c3fdiA</a>  | Alignment | not modelled | 99.5 | <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 uncharacterized protein from eubacterium2 ventriosum atcc 2 7560.  |
| 61 | <a href="#">c3t61A</a>  | Alignment | not modelled | 99.5 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> gluconokinase;<br><b>PDBTitle:</b> crystal structure of a gluconokinase from sinorhizobium meliloti 1021   |
| 62 | <a href="#">c3lv8A</a>  | Alignment | not modelled | 99.5 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> thymidylate kinase;<br><b>PDBTitle:</b> 1.8 angstrom resolution crystal structure of a thymidylate kinase2 (tnk) from vibrio cholerae o1 biovar eltor str. n16961 in complex3 with tmp, thymidine-5'-diphosphate and adp |
| 63 | <a href="#">d1rkba</a>  | Alignment | not modelled | 99.5 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 64 | <a href="#">c2jatA</a>  | Alignment | not modelled | 99.5 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> deoxyguanosine kinase;<br><b>PDBTitle:</b> structure of deoxyadenosine kinase from m.mycooides with2 products dcmp and a flexible dcdp bound   |
| 65 | <a href="#">c2yvuA</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable adenyl-sulfate kinase;<br><b>PDBTitle:</b> crystal structure of ape1195   |
| 66 | <a href="#">c3gmtB</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> adenylate kinase;<br><b>PDBTitle:</b> crystal structure of adenylate kinase from burkholderia pseudomallei   |
| 67 | <a href="#">c2z0hA</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> thymidylate kinase;<br><b>PDBTitle:</b> crystal structure of thymidylate kinase in complex with dtdp2 and adp from thermotoga maritima   |
| 68 | <a href="#">d1lvga</a>  | Alignment | not modelled | 99.4 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 69 | <a href="#">d1y63a</a>  | Alignment | not modelled | 99.4 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 70 | <a href="#">c2w0sB</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> thymidylate kinase;<br><b>PDBTitle:</b> crystal structure of vaccinia virus thymidylate kinase2 bound to brivudin-5'-monophosphate   |
| 71 | <a href="#">d1kaga</a>  | Alignment | not modelled | 99.4 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Shikimate kinase (AroK)  |
| 72 | <a href="#">d1kgda</a>  | Alignment | not modelled | 99.4 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 73 | <a href="#">d1nn5a</a>  | Alignment | not modelled | 99.4 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 74 | <a href="#">c2wwiC</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> thymidilate kinase, putative;<br><b>PDBTitle:</b> plasmidum falci parum thymidylate kinase in complex with2 aztmp and adp  |
| 75 | <a href="#">d2iyva1</a> | Alignment | not modelled | 99.4 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Shikimate kinase (AroK)  |
| 76 | <a href="#">c2plrB</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> probable thymidylate kinase;<br><b>PDBTitle:</b> crystal structure of dtmp kinase (st1543) from sulfolobus tokodaii2 strain7   |
| 77 | <a href="#">c2vliB</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> antibiotic resistance protein;<br><b>PDBTitle:</b> structure of deinococcus radiodurans tunicamycin resistance2 protein  |
| 78 | <a href="#">c1z6gA</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> guanylate kinase;<br><b>PDBTitle:</b> crystal structure of guanylate kinase from plasmodium falci parum  |
| 79 | <a href="#">c3trfB</a>  | Alignment | not modelled | 99.4 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> shikimate kinase;<br><b>PDBTitle:</b> structure of a shikimate kinase (arok) from coxiella burnetii  |
|    |                         |           |              |      | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases  |

|     |                         |           |              |      |    |  |
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| 80  | <a href="#">d1qhxa_</a> | Alignment | not modelled | 99.4 | 19 | <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Chloramphenicol phosphotransferase<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> atsk2;<br><b>PDBTitle:</b> crystal structure of shikimate kinase from arabidopsis thaliana2 (atsk2) |
| 81  | <a href="#">c3nwjB_</a> | Alignment | not modelled | 99.3 | 21 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Atu3015-like   |
| 82  | <a href="#">d2bdta1</a> | Alignment | not modelled | 99.3 | 15 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 83  | <a href="#">d1tmka_</a> | Alignment | not modelled | 99.3 | 12 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Adenosine-5' phosphosulfate kinase (APS kinase)  |
| 84  | <a href="#">d1m7gb_</a> | Alignment | not modelled | 99.3 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> guanylate kinase;<br><b>PDBTitle:</b> crystal structure of plasmodium vivax guanylate kinase   |
| 85  | <a href="#">c2qorA_</a> | Alignment | not modelled | 99.3 | 11 | <b>PDB header:</b> unknown function<br><b>Chain:</b> D: <b>PDB Molecule:</b> putative kinase;<br><b>PDBTitle:</b> crystal structure of a putative kinase (caur_3907) from chloroflexus2 aurantiacus j-10-fl at 1.70 a resolution   |
| 86  | <a href="#">c2rhmd_</a> | Alignment | not modelled | 99.3 | 15 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 87  | <a href="#">d2ocpa1</a> | Alignment | not modelled | 99.3 | 12 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> ATP sulfurylase C-terminal domain  |
| 88  | <a href="#">d1m8pa3</a> | Alignment | not modelled | 99.3 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> fructokinase;<br><b>PDBTitle:</b> crystal structure of putative fructose transport system kinase2 (yp_612366.1) from silicibacter sp. tm1040 at 1.95 a resolution  |
| 89  | <a href="#">c3c8uA_</a> | Alignment | not modelled | 99.3 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> pantothenate kinase;<br><b>PDBTitle:</b> pantothenate kinase from mycobacterium tuberculosis (mtpank) in2 complex with a coenzyme a derivative, form-i (rt)  |
| 90  | <a href="#">c2gesA_</a> | Alignment | not modelled | 99.3 | 12 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Phosphoribulokinase/pantothenate kinase  |
| 91  | <a href="#">d1rz3a_</a> | Alignment | not modelled | 99.3 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> bifunctional sat/aps kinase;<br><b>PDBTitle:</b> crystal structure of the bi-functional atp sulfurylase-aps kinase from2 aquifex aeolicus, a chemolithotrophic thermophile   |
| 92  | <a href="#">c2gksB_</a> | Alignment | not modelled | 99.2 | 17 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 93  | <a href="#">d1p5zb_</a> | Alignment | not modelled | 99.2 | 13 | <b>PDB header:</b> membrane protein<br><b>Chain:</b> C: <b>PDB Molecule:</b> 55 kda erythrocyte membrane protein;<br><b>PDBTitle:</b> crystal structure of the kinase domain of mpp1/p55   |
| 94  | <a href="#">d1gsia_</a> | Alignment | not modelled | 99.2 | 16 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 95  | <a href="#">d1nksa_</a> | Alignment | not modelled | 99.2 | 18 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 96  | <a href="#">d1sq5a_</a> | Alignment | not modelled | 99.2 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> deoxycytidine kinase;<br><b>PDBTitle:</b> human deoxycytidine kinase damp, udp, mg ion product complex   |
| 97  | <a href="#">c2qroB_</a> | Alignment | not modelled | 99.2 | 13 | <b>PDB header:</b> membrane protein<br><b>Chain:</b> C: <b>PDB Molecule:</b> 55 kda erythrocyte membrane protein;<br><b>PDBTitle:</b> crystal structure of the kinase domain of mpp1/p55   |
| 98  | <a href="#">c3neyC_</a> | Alignment | not modelled | 99.2 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> polynucleotide kinase;<br><b>PDBTitle:</b> t4 polynucleotide kinase/phosphatase with bound sulfate and2 magnesium.   |
| 99  | <a href="#">c2ia5C_</a> | Alignment | not modelled | 99.2 | 18 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases  |
| 100 | <a href="#">d1khta_</a> | Alignment | not modelled | 99.2 | 18 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Atu3015-like   |
| 101 | <a href="#">d1zp6a1</a> | Alignment | not modelled | 99.1 | 17 | <b>PDB header:</b> unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical 39.9 kda protein;<br><b>PDBTitle:</b> crystal structure of yfh7 from saccharomyces cerevisiae: a2 putative p-loop containing kinase with a circular3 permutation.  |
| 102 | <a href="#">c2gaaA_</a> | Alignment | not modelled | 99.1 | 20 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Adenosine-5' phosphosulfate kinase (APS kinase)  |
| 103 | <a href="#">d1m7ga_</a> | Alignment | not modelled | 99.1 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> pantothenate kinase;<br><b>PDBTitle:</b> structure of the pantothenate kinase (coaa) from coxiella burnetii  |
| 104 | <a href="#">c3tqcB_</a> | Alignment | not modelled | 99.1 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> polynucleotide kinase;<br><b>PDBTitle:</b> structure and mechanism of t4 polynucleotide kinase   |
| 105 | <a href="#">c1ly1A_</a> | Alignment | not modelled | 99.1 | 18 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> polynucleotide kinase;<br><b>PDBTitle:</b> structure and mechanism of t4 polynucleotide kinase   |

|     |                         |           |              |      |    |   |
|-----|-------------------------|-----------|--------------|------|----|---|
| 106 | <a href="#">d1lyla</a>  | Alignment | not modelled | 99.1 | 18 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 107 | <a href="#">d1ki9a</a>  | Alignment | not modelled | 99.1 | 15 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 108 | <a href="#">c1m8pB</a>  | Alignment | not modelled | 99.1 | 18 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> sulfate adenyllyltransferase;<br><b>PDBTitle:</b> crystal structure of p. chrysogenum atp sulfurylase in the t-state  |
| 109 | <a href="#">d2vp4a1</a> | Alignment | not modelled | 99.1 | 15 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 110 | <a href="#">c2vp4D</a>  | Alignment | not modelled | 99.0 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> deoxyribonucleoside kinase;<br><b>PDBTitle:</b> structural studies of nucleoside analog and feedback2 inhibitor binding to drosophila melanogaster3 multisubstrate deoxyribonucleoside kinase |
| 111 | <a href="#">d1x6va3</a> | Alignment | not modelled | 98.9 | 21 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Adenosine-5'-phosphosulfate kinase (APS kinase)   |
| 112 | <a href="#">c3cr8C</a>  | Alignment | not modelled | 98.9 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> sulfate adenyllyltransferase, adenyllylsulfate<br><b>PDBTitle:</b> hexameric aps kinase from thiobacillus denitrificans   |
| 113 | <a href="#">d1lw7a2</a> | Alignment | not modelled | 98.9 | 14 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 114 | <a href="#">d1odfa</a>  | Alignment | not modelled | 98.9 | 13 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Phosphoribulokinase/pantothenate kinase   |
| 115 | <a href="#">c1xnjB</a>  | Alignment | not modelled | 98.8 | 18 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> bifunctional 3'-phosphoadenosine 5'-phosphosulfate<br><b>PDBTitle:</b> aps complex of human paps synthetase 1   |
| 116 | <a href="#">c3ld9D</a>  | Alignment | not modelled | 98.8 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> thymidylate kinase;<br><b>PDBTitle:</b> crystal structure of thymidylate kinase from ehrlichia chaffeensis at2 2.15a resolution   |
| 117 | <a href="#">d1a7ja</a>  | Alignment | not modelled | 98.8 | 19 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Phosphoribulokinase/pantothenate kinase   |
| 118 | <a href="#">d1bfaf1</a> | Alignment | not modelled | 98.7 | 9  | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase, kinase domain                                   |
| 119 | <a href="#">d1yj5a2</a> | Alignment | not modelled | 98.7 | 14 | <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases<br><b>Family:</b> Nucleotide and nucleoside kinases   |
| 120 | <a href="#">c1lw7A</a>  | Alignment | not modelled | 98.6 | 17 | <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  |