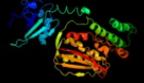
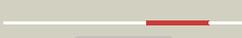


# Phyre2

|               |                             |
|---------------|-----------------------------|
| Email         | I.a.kelley@imperial.ac.uk   |
| Description   | P08400                      |
| Date          | Thu Jan 5 11:01:28 GMT 2012 |
| Unique Job ID | 99fff6a57a9cd406            |

Detailed template information

| #  | Template                | Alignment Coverage   | 3D Model  | Confidence | % i.d. | Template Information  |
|----|-------------------------|--|---|------------|--------|---|
| 1  | <a href="#">c3a0rA_</a> | <br>Alignment   |    | 100.0      | 21     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> crystal structure of histidine kinase thka (tm1359) in complex with2 response regulator protein trra (tm1360)                                     |
| 2  | <a href="#">c2q8fA_</a> | <br>Alignment   |    | 100.0      | 19     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> [pyruvate dehydrogenase [lipoamide]] kinase isozyme 1;<br><b>PDBTitle:</b> structure of pyruvate dehydrogenase kinase isoform 1   |
| 3  | <a href="#">c3d2rB_</a> | <br>Alignment   |    | 100.0      | 20     | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> [pyruvate dehydrogenase [lipoamide]] kinase isozyme 4;<br><b>PDBTitle:</b> crystal structure of pyruvate dehydrogenase kinase isoform 4 in2 complex with adp                          |
| 4  | <a href="#">c2bu8A_</a> | <br>Alignment   |    | 100.0      | 18     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> pyruvate dehydrogenase kinase isoenzyme 2;<br><b>PDBTitle:</b> crystal structures of human pyruvate dehydrogenase kinase 22 containing physiological and synthetic ligands            |
| 5  | <a href="#">c3d36B_</a> | <br>Alignment |  | 100.0      | 25     | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> B: <b>PDB Molecule:</b> sporulation kinase b;<br><b>PDBTitle:</b> how to switch off a histidine kinase: crystal structure of2 geobacillus stearotherophilus kinb with the inhibitor sda |
| 6  | <a href="#">c1y8oA_</a> | <br>Alignment |  | 100.0      | 17     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> [pyruvate dehydrogenase [lipoamide]] kinase isozyme 3;<br><b>PDBTitle:</b> crystal structure of the pdk3-12 complex   |
| 7  | <a href="#">c1qjvA_</a> | <br>Alignment |  | 100.0      | 15     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> [3-methyl-2-oxobutanoate dehydrogenase<br><b>PDBTitle:</b> branched-chain alpha-ketoacid dehydrogenase kinase (bck)2 complexed with atp-gamma-s                                       |
| 8  | <a href="#">c2c2aA_</a> | <br>Alignment |  | 100.0      | 31     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor histidine kinase;<br><b>PDBTitle:</b> structure of the entire cytoplasmic portion of a sensor2 histidine kinase protein  |
| 9  | <a href="#">d1jm6a2</a> | <br>Alignment |  | 99.9       | 20     | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> alpha-ketoacid dehydrogenase kinase, C-terminal domain    |
| 10 | <a href="#">d1gkz2</a>  | <br>Alignment |  | 99.9       | 16     | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> alpha-ketoacid dehydrogenase kinase, C-terminal domain    |
| 11 | <a href="#">c3a0tA_</a> | <br>Alignment |  | 99.9       | 23     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> catalytic domain of histidine kinase thka (tm1359) in2 complex with adp and mg ion (trigonal)   |

|    |                         |           |   |      |    |   |
|----|-------------------------|-----------|---|------|----|---|
| 12 | <a href="#">d2c2aa2</a> | Alignment |     | 99.9 | 30 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase                            |
| 13 | <a href="#">d1ld0a_</a> | Alignment |    | 99.9 | 19 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase                            |
| 14 | <a href="#">c1b3qA_</a> | Alignment |    | 99.9 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein (chemotaxis protein chea);<br><b>PDBTitle:</b> crystal structure of chea-289, a signal transducing histidine kinase   |
| 15 | <a href="#">c2ch4A_</a> | Alignment |    | 99.9 | 23 | <b>PDB header:</b> transferase/chemotaxis<br><b>Chain:</b> A: <b>PDB Molecule:</b> chemotaxis protein chea;<br><b>PDBTitle:</b> complex between bacterial chemotaxis histidine kinase chea2 domains p4 and p5 and receptor-adaptor protein chew |
| 16 | <a href="#">d1bxda_</a> | Alignment |    | 99.9 | 29 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase                            |
| 17 | <a href="#">d1i58a_</a> | Alignment |    | 99.9 | 24 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase                            |
| 18 | <a href="#">d1ysra1</a> | Alignment |  | 99.9 | 25 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase                            |
| 19 | <a href="#">c3jz3B_</a> | Alignment |  | 99.8 | 27 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> sensor protein qsec;<br><b>PDBTitle:</b> structure of the cytoplasmic segment of histidine kinase qsec  |
| 20 | <a href="#">d1r62a_</a> | Alignment |  | 99.8 | 21 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase                            |
| 21 | <a href="#">d2hkja3</a> | Alignment | not modelled  | 99.8 | 25 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain          |
| 22 | <a href="#">c1mx0D_</a> | Alignment | not modelled  | 99.7 | 26 | <b>PDB header:</b> isomerase<br><b>Chain:</b> D: <b>PDB Molecule:</b> type ii dna topoisomerase vi subunit b;<br><b>PDBTitle:</b> structure of topoisomerase subunit  |
| 23 | <a href="#">c2zkbB_</a> | Alignment | not modelled  | 99.7 | 27 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> type 2 dna topoisomerase 6 subunit b;<br><b>PDBTitle:</b> crystal structure of an intact type ii dna topoisomerase:2 insights into dna transfer mechanisms                |
| 24 | <a href="#">c3gieA_</a> | Alignment | not modelled  | 99.6 | 28 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor histidine kinase desk;<br><b>PDBTitle:</b> crystal structure of desk_h188e in complex with amp-pcp   |
| 25 | <a href="#">c3ehgA_</a> | Alignment | not modelled  | 99.6 | 22 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor kinase (yocf protein);<br><b>PDBTitle:</b> crystal structure of the atp-binding domain of desk in complex with2 atp  |
| 26 | <a href="#">c3zxqA_</a> | Alignment | not modelled  | 99.6 | 18 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypoxia sensor histidine kinase response regulator dost;<br><b>PDBTitle:</b> crystal structure of the atp-binding domain of mycobacterium2 tuberculosis dost            |
| 27 | <a href="#">c2q2eB_</a> | Alignment | not modelled  | 99.5 | 25 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> type 2 dna topoisomerase 6 subunit b;<br><b>PDBTitle:</b> crystal structure of the topoisomerase vi holoenzyme from2 methanosarcina mazei                                 |
| 28 | <a href="#">d1h7sa2</a> | Alignment | not modelled  | 99.4 | 21 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase   |

|    |                         |           |              |      |    |   |
|----|-------------------------|-----------|--------------|------|----|---|
|    |                         |           |              |      |    | <b>Family:</b> DNA gyrase/MutL, N-terminal domain<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> redox sensor histidine kinase response regulator devS;<br><b>PDBTitle:</b> crystal structure of the mutant atp-binding domain of2 mycobacterium tuberculosis doss                  |
| 29 | <a href="#">c3zxoB</a>  | Alignment | not modelled | 99.4 | 23 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain  |
| 30 | <a href="#">d1bkna2</a> | Alignment | not modelled | 99.4 | 21 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain  |
| 31 | <a href="#">d1th8a</a>  | Alignment | not modelled | 99.4 | 23 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Histidine kinase  |
| 32 | <a href="#">d1b63a2</a> | Alignment | not modelled | 99.3 | 18 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain  |
| 33 | <a href="#">d1y8oa2</a> | Alignment | not modelled | 99.2 | 17 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> alpha-ketoacid dehydrogenase kinase, C-terminal domain  |
| 34 | <a href="#">c3na3A</a>  | Alignment | not modelled | 98.9 | 31 | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna mismatch repair protein mlh1;<br><b>PDBTitle:</b> mutl protein homolog 1 isoform 1 from homo sapiens  |
| 35 | <a href="#">c2r78D</a>  | Alignment | not modelled | 98.7 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> crystal structure of a domain of the sensory box sensor2 histidine kinase/response regulator from geobacter3 sulfurreducens   |
| 36 | <a href="#">c3mfxA</a>  | Alignment | not modelled | 98.7 | 19 | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensory box/ggdef family protein;<br><b>PDBTitle:</b> crystal structure of the sensory box domain of the sensory-2 box/ggdef protein so_1695 from shewanella oneidensis,3 northeast structural genomics consortium target sor288b     |
| 37 | <a href="#">d1ixma</a>  | Alignment | not modelled | 98.7 | 10 | <b>Fold:</b> Sporulation response regulatory protein Spo0B<br><b>Superfamily:</b> Sporulation response regulatory protein Spo0B<br><b>Family:</b> Sporulation response regulatory protein Spo0B   |
| 38 | <a href="#">d1ew0a</a>  | Alignment | not modelled | 98.6 | 21 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Heme-binding PAS domain   |
| 39 | <a href="#">c3bwlA</a>  | Alignment | not modelled | 98.6 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> crystal structure of pas domain of htr-like protein from haloarcula2 marismortui  |
| 40 | <a href="#">c2jheB</a>  | Alignment | not modelled | 98.6 | 14 | <b>PDB header:</b> transcription<br><b>Chain:</b> B: <b>PDB Molecule:</b> transcription regulator tyrr;<br><b>PDBTitle:</b> n-terminal domain of tyrr transcription factor (residues 1 -2 190)  |
| 41 | <a href="#">c3mxqC</a>  | Alignment | not modelled | 98.6 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> crystal structure of sensory box sensor histidine kinase from vibrio2 cholerae  |
| 42 | <a href="#">c3mqoB</a>  | Alignment | not modelled | 98.4 | 11 | <b>PDB header:</b> transcription regulator<br><b>Chain:</b> B: <b>PDB Molecule:</b> transcriptional regulator, luxr family;<br><b>PDBTitle:</b> the crystal structure of the pas domain in complex with isopropanol of2 a transcriptional regulator in the luxr family from burkholderia3 thailandensis to 1.7a |
| 43 | <a href="#">c3h41B</a>  | Alignment | not modelled | 98.4 | 22 | <b>PDB header:</b> dna binding protein, protein binding<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna mismatch repair protein pms1;<br><b>PDBTitle:</b> crystal structure of n terminal domain of a dna repair protein   |
| 44 | <a href="#">c3oloB</a>  | Alignment | not modelled | 98.3 | 8  | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> two-component sensor histidine kinase;<br><b>PDBTitle:</b> crystal structure of a pas domain from two-component sensor histidine2 kinase  |
| 45 | <a href="#">c1v9yA</a>  | Alignment | not modelled | 98.3 | 16 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> heme pas sensor protein;<br><b>PDBTitle:</b> crystal structure of the heme pas sensor domain of ec dos (ferric2 form)   |
| 46 | <a href="#">d1v9ya</a>  | Alignment | not modelled | 98.3 | 16 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Heme-binding PAS domain   |
| 47 | <a href="#">c3fg8B</a>  | Alignment | not modelled | 98.3 | 15 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein rha05790;<br><b>PDBTitle:</b> crystal structure of pas domain of rha05790   |
| 48 | <a href="#">c2gj3A</a>  | Alignment | not modelled | 98.3 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> nitrogen fixation regulatory protein;<br><b>PDBTitle:</b> crystal structure of the fad-containing pas domain of the2 protein nifl from azotobacter vinelandii.  |
| 49 | <a href="#">c3b33A</a>  | Alignment | not modelled | 98.3 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> crystal structure of the pas domain of nitrogen regulation protein2 nr(ii) from vibrio parahaemolyticus   |
| 50 | <a href="#">c2w0nA</a>  | Alignment | not modelled | 98.2 | 19 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein dcus;<br><b>PDBTitle:</b> plasticity of pas domain and potential role for signal2 transduction in the histidine-kinase dcus  |
| 51 | <a href="#">d1nwza</a>  | Alignment | not modelled | 98.2 | 13 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> PYP-like  |
| 52 | <a href="#">c3luqC</a>  | Alignment | not modelled | 98.2 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> the crystal structure of a pas domain from a sensory box2 histidine kinase regulator from geobacter sulfurreducens to3  |

|    |                         |           |              |      |  |
|----|-------------------------|-----------|--------------|------|--|
|    |                         |           |              |      | 2.5a   |
| 53 | <a href="#">c2v1bA</a>  | Alignment | not modelled | 98.2 | 15<br><b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> nph1-1;<br><b>PDBTitle:</b> n- and c-terminal helices of oat lov2 (404-546) are2 involved in light-induced signal transduction (room3 temperature (293k) light structure of lov2 (404-546))                                    |
| 54 | <a href="#">c3caxA</a>  | Alignment | not modelled | 98.2 | 16<br><b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein pf0695;<br><b>PDBTitle:</b> crystal structure of uncharacterized protein pf0695  |
| 55 | <a href="#">c3lyxA</a>  | Alignment | not modelled | 98.1 | 19<br><b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensory box/ggdef domain protein;<br><b>PDBTitle:</b> crystal structure of the pas domain of the protein cps_12912 from colwellia psychrerythraea. northeast structural3 genomics consortium target id csr222b               |
| 56 | <a href="#">c1bknA</a>  | Alignment | not modelled | 98.1 | 22<br><b>PDB header:</b> dna repair<br><b>Chain:</b> A: <b>PDB Molecule:</b> mutI;<br><b>PDBTitle:</b> crystal structure of an n-terminal 40kd fragment of e. coli2 dna mismatch repair protein mutI   |
| 57 | <a href="#">d1kija2</a> | Alignment | not modelled | 98.0 | 22<br><b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain   |
| 58 | <a href="#">d1mzua</a>  | Alignment | not modelled | 98.0 | 11<br><b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> PYP-like   |
| 59 | <a href="#">c3k3dA</a>  | Alignment | not modelled | 98.0 | 15<br><b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein rv1364c/mt1410;<br><b>PDBTitle:</b> the n-terminal pas domain crystal structure of rv1364c from2 mycobacterium tuberculosis at 2.3 angstrom  |
| 60 | <a href="#">d1otda</a>  | Alignment | not modelled | 98.0 | 14<br><b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> PYP-like   |
| 61 | <a href="#">c3mjqB</a>  | Alignment | not modelled | 97.9 | 16<br><b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of the pas domain of q24qt8_deshy protein from2 desulfotuberculum hafniense. northeast structural genomics3 consortium target dhr85c. |
| 62 | <a href="#">c3kx0X</a>  | Alignment | not modelled | 97.9 | 15<br><b>PDB header:</b> signaling protein<br><b>Chain:</b> X: <b>PDB Molecule:</b> uncharacterized protein rv1364c/mt1410;<br><b>PDBTitle:</b> crystal structure of the pas domain of rv1364c   |
| 63 | <a href="#">c2pr6A</a>  | Alignment | not modelled | 97.9 | 16<br><b>PDB header:</b> flavoprotein, signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> blue-light photoreceptor;<br><b>PDBTitle:</b> structural basis for light-dependent signaling in the dimeric lov2 photosensor ytvA (light structure)  |
| 64 | <a href="#">d1s16a2</a> | Alignment | not modelled | 97.9 | 17<br><b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain   |
| 65 | <a href="#">c3iedA</a>  | Alignment | not modelled | 97.9 | 17<br><b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> heat shock protein;<br><b>PDBTitle:</b> crystal structure of n-terminal domain of plasmodium falciparum hsp902 (pf14_0417) in complex with amppn   |
| 66 | <a href="#">d1y28a</a>  | Alignment | not modelled | 97.9 | 17<br><b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Heme-binding PAS domain  |
| 67 | <a href="#">c1ea6A</a>  | Alignment | not modelled | 97.9 | 28<br><b>PDB header:</b> dna repair<br><b>Chain:</b> A: <b>PDB Molecule:</b> pms1 protein homolog 2;<br><b>PDBTitle:</b> n-terminal 40kda fragment of nhpms2 complexed with adp  |
| 68 | <a href="#">c1y4sA</a>  | Alignment | not modelled | 97.8 | 17<br><b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> chaperone protein htpg;<br><b>PDBTitle:</b> conformation rearrangement of heat shock protein 90 upon2 adp binding  |
| 69 | <a href="#">c3mr0B</a>  | Alignment | not modelled | 97.8 | 15<br><b>PDB header:</b> transcription regulator<br><b>Chain:</b> B: <b>PDB Molecule:</b> sensory box histidine kinase/response regulator;<br><b>PDBTitle:</b> crystal structure of sensory box histidine kinase/response regulator2 from burkholderia thailandensis e264                                    |
| 70 | <a href="#">d1xfna1</a> | Alignment | not modelled | 97.8 | 14<br><b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> PYP-like   |
| 71 | <a href="#">c3p7nB</a>  | Alignment | not modelled | 97.8 | 12<br><b>PDB header:</b> dna binding protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> sensor histidine kinase;<br><b>PDBTitle:</b> crystal structure of light activated transcription factor el222 from2 erythrobacter litoralis   |
| 72 | <a href="#">d1ei1a2</a> | Alignment | not modelled | 97.8 | 20<br><b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain   |
| 73 | <a href="#">d1pvga2</a> | Alignment | not modelled | 97.8 | 15<br><b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain   |
| 74 | <a href="#">c3fc7B</a>  | Alignment | not modelled | 97.7 | 20<br><b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> htr-like protein;<br><b>PDBTitle:</b> the crystal structure of a domain of htr-like protein from haloarcula2 marismortui atcc 43049  |
| 75 | <a href="#">d1uy1a</a>  | Alignment | not modelled | 97.7 | 11<br><b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Heat shock protein 90, HSP90, N-terminal domain  |
| 76 | <a href="#">d1xj3a1</a> | Alignment | not modelled | 97.7 | 18<br><b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)  |

|    |                         |           |              |      |    | Family:Heme-binding PAS domain  |
|----|-------------------------|-----------|--------------|------|----|---|
| 77 | <a href="#">c2qkpD</a>  | Alignment | not modelled | 97.7 | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> D: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of c-terminal domain of smu_1151c from streptococcus2 mutans   |
| 78 | <a href="#">c2fwyA</a>  | Alignment | not modelled | 97.6 | 11 | <b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> heat shock protein hsp 90-alpha;<br><b>PDBTitle:</b> structure of human hsp90-alpha bound to the potent water2 soluble inhibitor pu-h64   |
| 79 | <a href="#">c1kijB</a>  | Alignment | not modelled | 97.6 | 23 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna gyrase subunit b;<br><b>PDBTitle:</b> crystal structure of the 43k atpase domain of thermus thermophilus2 gyrase b in complex with novobiocin   |
| 80 | <a href="#">c2l4rA</a>  | Alignment | not modelled | 97.6 | 12 | <b>PDB header:</b> transport protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> potassium voltage-gated channel subfamily h member 2;<br><b>PDBTitle:</b> nmr solution structure of the n-terminal pas domain of herg   |
| 81 | <a href="#">c1ei1B</a>  | Alignment | not modelled | 97.6 | 19 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna gyrase b;<br><b>PDBTitle:</b> dimerization of e. coli dna gyrase b provides a structural mechanism2 for activating the atpase catalytic center  |
| 82 | <a href="#">c3a0vA</a>  | Alignment | not modelled | 97.6 | 22 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> pas domain of histidine kinase thka (tm1359) (semet,2 f486m/f489m)  |
| 83 | <a href="#">c2iopD</a>  | Alignment | not modelled | 97.6 | 20 | <b>PDB header:</b> chaperone<br><b>Chain:</b> D: <b>PDB Molecule:</b> chaperone protein htpg;<br><b>PDBTitle:</b> crystal structure of full-length htpg, the escherichia coli2 hsp90, bound to adp  |
| 84 | <a href="#">d2gqa1</a>  | Alignment | not modelled | 97.5 | 22 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Heat shock protein 90, HSP90, N-terminal domain   |
| 85 | <a href="#">c2cg9A</a>  | Alignment | not modelled | 97.5 | 15 | <b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> atp-dependent molecular chaperone hsp82;<br><b>PDBTitle:</b> crystal structure of an hsp90-sba1 closed chaperone complex  |
| 86 | <a href="#">c2vlgD</a>  | Alignment | not modelled | 97.5 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> sporulation kinase a;<br><b>PDBTitle:</b> kina pas-a domain, homodimer  |
| 87 | <a href="#">c2akpA</a>  | Alignment | not modelled | 97.5 | 16 | <b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> atp-dependent molecular chaperone hsp82;<br><b>PDBTitle:</b> hsp90 delta24-n210 mutant  |
| 88 | <a href="#">c2o1wB</a>  | Alignment | not modelled | 97.5 | 21 | <b>PDB header:</b> chaperone<br><b>Chain:</b> B: <b>PDB Molecule:</b> endoplasmic;<br><b>PDBTitle:</b> structure of n-terminal plus middle domains (n+m) of grp94   |
| 89 | <a href="#">c3pehB</a>  | Alignment | not modelled | 97.4 | 20 | <b>PDB header:</b> chaperone<br><b>Chain:</b> B: <b>PDB Molecule:</b> endoplasmic homolog;<br><b>PDBTitle:</b> crystal structure of the n-terminal domain of an hsp90 from plasmodium2 falciparum, pfl1070c in the presence of a thienopyrimidine derivative                                  |
| 90 | <a href="#">c1s16B</a>  | Alignment | not modelled | 97.4 | 19 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> topoisomerase iv subunit b;<br><b>PDBTitle:</b> crystal structure of e. coli topoisomerase iv pare 43kda subunit2 complexed with adpnp  |
| 91 | <a href="#">c3eehA</a>  | Alignment | not modelled | 97.4 | 21 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative light and redox sensing histidine kinase;<br><b>PDBTitle:</b> the crystal structure of the domain of the putative light and redox2 sensing histidine kinase from haloarcula marismortui                      |
| 92 | <a href="#">c3fl0B</a>  | Alignment | not modelled | 97.4 | 9  | <b>PDB header:</b> transcription<br><b>Chain:</b> B: <b>PDB Molecule:</b> aryl hydrocarbon receptor nuclear translocator;<br><b>PDBTitle:</b> crystal structure of the high affinity heterodimer of hif22 alpha and arnt c-terminal pas domains, with an internally-3 bound artificial ligand |
| 93 | <a href="#">c2iorA</a>  | Alignment | not modelled | 97.4 | 26 | <b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> chaperone protein htpg;<br><b>PDBTitle:</b> crystal structure of the n-terminal domain of htpg, the2 escherichia coli hsp90, bound to adp   |
| 94 | <a href="#">d2iwxa1</a> | Alignment | not modelled | 97.4 | 14 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Heat shock protein 90, HSP90, N-terminal domain   |
| 95 | <a href="#">c2wkqA</a>  | Alignment | not modelled | 97.3 | 14 | <b>PDB header:</b> transferase, cell adhesion<br><b>Chain:</b> A: <b>PDB Molecule:</b> nph1-1, ras-related c3 botulinum toxin substrate<br><b>PDBTitle:</b> structure of a photoactivatable rac1 containing the lov22 c450a mutant  |
| 96 | <a href="#">c3ewkA</a>  | Alignment | not modelled | 97.3 | 12 | <b>PDB header:</b> flavoprotein<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> structure of the redox sensor domain of methylococcus capsulatus2 (bath) mmos  |
| 97 | <a href="#">c1zwhA</a>  | Alignment | not modelled | 97.3 | 14 | <b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> atp-dependent molecular chaperone hsp82;<br><b>PDBTitle:</b> yeast hsp82 in complex with the novel hsp90 inhibitor radester amine   |
| 98 | <a href="#">d1ll8a</a>  | Alignment | not modelled | 97.3 | 14 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> N-terminal PAS domain of Pas kinase   |
| 99 | <a href="#">d1p97a</a>  | Alignment | not modelled | 97.2 | 12 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Hypoxia-inducible factor Hif2a, C-terminal domain   |

|     |                         |           |              |      |    |  |
|-----|-------------------------|-----------|--------------|------|----|--|
| 100 | <a href="#">d1uyma_</a> | Alignment | not modelled | 97.2 | 12 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Heat shock protein 90, HSP90, N-terminal domain  |
| 101 | <a href="#">c3rtyA_</a> | Alignment | not modelled | 97.2 | 11 | <b>PDB header:</b> circadian clock protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> period circadian protein;<br><b>PDBTitle:</b> structure of an enclosed dimer formed by the drosophila period protein   |
| 102 | <a href="#">d1s14a_</a> | Alignment | not modelled | 97.2 | 16 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> DNA gyrase/MutL, N-terminal domain   |
| 103 | <a href="#">c1zxnB_</a> | Alignment | not modelled | 97.1 | 17 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna topoisomerase ii, alpha isozyme;<br><b>PDBTitle:</b> human dna topoisomerase ii a atpase/adb   |
| 104 | <a href="#">c3g7bB_</a> | Alignment | not modelled | 97.1 | 19 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna gyrase subunit b;<br><b>PDBTitle:</b> staphylococcus aureus gyrase b co-complex with inhibitor   |
| 105 | <a href="#">d1n9la_</a> | Alignment | not modelled | 97.1 | 15 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Flavin-binding PAS domain  |
| 106 | <a href="#">c3gecA_</a> | Alignment | not modelled | 97.0 | 6  | <b>PDB header:</b> circadian clock protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> period circadian protein;<br><b>PDBTitle:</b> crystal structure of a tandem pas domain fragment of 2 drosophila period   |
| 107 | <a href="#">c1wa9A_</a> | Alignment | not modelled | 97.0 | 10 | <b>PDB header:</b> circadian rhythm<br><b>Chain:</b> A: <b>PDB Molecule:</b> period circadian protein;<br><b>PDBTitle:</b> crystal structure of the pas repeat region of the 2 drosophila clock protein period   |
| 108 | <a href="#">c2z6dB_</a> | Alignment | not modelled | 96.9 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> phototropin-2;<br><b>PDBTitle:</b> crystal structure of lov1 domain of phototropin2 from 2 arabidopsis thaliana  |
| 109 | <a href="#">d1bywa_</a> | Alignment | not modelled | 96.9 | 13 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Flavin-binding PAS domain  |
| 110 | <a href="#">c3lnuA_</a> | Alignment | not modelled | 96.9 | 17 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> topoisomerase iv subunit b;<br><b>PDBTitle:</b> crystal structure of pare subunit  |
| 111 | <a href="#">d1jnua_</a> | Alignment | not modelled | 96.8 | 11 | <b>Fold:</b> Profilin-like<br><b>Superfamily:</b> PYP-like sensor domain (PAS domain)<br><b>Family:</b> Flavin-binding PAS domain  |
| 112 | <a href="#">c2kdkA_</a> | Alignment | not modelled | 96.8 | 11 | <b>PDB header:</b> transcription regulator<br><b>Chain:</b> A: <b>PDB Molecule:</b> aryl hydrocarbon receptor nuclear translocator-like protein<br><b>PDBTitle:</b> structure of human circadian clock protein bmal2 c-terminal pas domain   |
| 113 | <a href="#">c2oolA_</a> | Alignment | not modelled | 96.6 | 9  | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> crystal structure of the chromophore-binding domain of an unusual 2 bacteriophytochrome rpbphp3 from r. palustris  |
| 114 | <a href="#">d1qy5a_</a> | Alignment | not modelled | 96.5 | 20 | <b>Fold:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Superfamily:</b> ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase<br><b>Family:</b> Heat shock protein 90, HSP90, N-terminal domain  |
| 115 | <a href="#">c3ke6A_</a> | Alignment | not modelled | 96.4 | 26 | <b>PDB header:</b> unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein rv1364c/mt1410;<br><b>PDBTitle:</b> the crystal structure of the rsbu and rsbw domains of rv1364c from 2 mycobacterium tuberculosis   |
| 116 | <a href="#">c3icyB_</a> | Alignment | not modelled | 96.4 | 12 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> sensor protein;<br><b>PDBTitle:</b> the crystal structure of sensory box histidine 2 kinase/response regulator domain from chlorobium tepidum 3 t/s  |
| 117 | <a href="#">c1qzrA_</a> | Alignment | not modelled | 96.4 | 15 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna topoisomerase ii;<br><b>PDBTitle:</b> crystal structure of the atpase region of saccharomyces cerevisiae 2 topoisomerase ii bound to icrf-187 (dexrazoxane)  |
| 118 | <a href="#">c2o1uA_</a> | Alignment | not modelled | 96.3 | 23 | <b>PDB header:</b> chaperone<br><b>Chain:</b> A: <b>PDB Molecule:</b> endoplasmic;<br><b>PDBTitle:</b> structure of full length grp94 with amp-pnp bound   |
| 119 | <a href="#">c2o9bA_</a> | Alignment | not modelled | 95.7 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> bacteriophytochrome;<br><b>PDBTitle:</b> crystal structure of bacteriophytochrome chromophore binding domain   |
| 120 | <a href="#">c3h9wA_</a> | Alignment | not modelled | 94.9 | 11 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> diguanylate cyclase with pas/pac sensor;<br><b>PDBTitle:</b> crystal structure of the n-terminal domain of diguanylate cyclase with 2 pas/pac sensor (maqu_2914) from marinobacter aquaeolei, northeast 3 structural genomics consortium target mqr66c |