

# Phyre2

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|---------------|-----------------------------------|
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| Description   | RVBD3205c (-)<br>_3581623_3582501 |
| Date          | Thu Aug 8 16:20:40 BST<br>2019    |
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Detailed template information

| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information  |
|----|-------------------------|---|---|------------|--------|---|
| 1  | <a href="#">d2ppqa1</a> |  Alignment   |    | 99.6       | 14     | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)<br><b>Family:</b> APH phosphotransferases   |
| 2  | <a href="#">c4ockA</a>  |  Alignment   |    | 99.6       | 18     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> n-acetylhexosamine 1-phosphate kinase;<br><b>PDBTitle:</b> n-acetylhexosamine 1-phosphate kinase in complex with glcnac and2 amppnp   |
| 3  | <a href="#">c6ef6A</a>  |  Alignment   |    | 99.5       | 20     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aminoglycoside phosphotransferase;<br><b>PDBTitle:</b> structure of the microcompartment-associated aminopropanol kinase  |
| 4  | <a href="#">d1zyla1</a> |  Alignment   |   | 99.4       | 17     | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)<br><b>Family:</b> APH phosphotransferases   |
| 5  | <a href="#">c4pdyA</a>  |  Alignment |  | 99.3       | 16     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aminoglycoside phosphotransferase;<br><b>PDBTitle:</b> crystal structure of aminoglycoside phosphotransferase from2 alicyclobacillus acidocaldarius subsp. acidocaldarius dsm 446           |
| 6  | <a href="#">c3ovcA</a>  |  Alignment |  | 99.2       | 13     | <b>PDB header:</b> transferase/antibiotic<br><b>Chain:</b> A: <b>PDB Molecule:</b> hygromycin-b 4-o-kinase;<br><b>PDBTitle:</b> crystal structure of aminoglycoside phosphotransferase aph(4)-ia  |
| 7  | <a href="#">c2q83A</a>  |  Alignment |  | 99.0       | 14     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ytaa protein;<br><b>PDBTitle:</b> crystal structure of ytaa (2635576) from bacillus subtilis at 2.50 a2 resolution  |
| 8  | <a href="#">c3jr1A</a>  |  Alignment |  | 99.0       | 11     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative fructosamine-3-kinase;<br><b>PDBTitle:</b> crystal structure of putative fructosamine-3-kinase (yp_719053.1) from2 haemophilus somnus 129pt at 2.32 a resolution                   |
| 9  | <a href="#">c3dxqB</a>  |  Alignment |  | 98.9       | 16     | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> choline/ethanolamine kinase family protein;<br><b>PDBTitle:</b> crystal structure of choline/ethanolamine kinase family protein2 (np_106042.1) from mesorhizobium loti at 2.55 a resolution |
| 10 | <a href="#">c3dxaA</a>  |  Alignment |  | 98.8       | 11     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative acyl-coa dehydrogenase;<br><b>PDBTitle:</b> crystal structure of a putative aminoglycoside phosphotransferase2 (reut_a1007) from ralstonia eutropha jmp134 at 2.32 a resolution    |
| 11 | <a href="#">c3f7wA</a>  |  Alignment |  | 98.8       | 15     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative fructosamine-3-kinase;<br><b>PDBTitle:</b> crystal structure of putative fructosamine-3-kinase (yp_290396.1) from2 thermobifida fusca yx-er1 at 1.85 a resolution                  |

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|----|-------------------------|-----------|---|------|----|---|
| 12 | <a href="#">d1nd4a_</a> | Alignment |     | 98.8 | 12 | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)<br><b>Family:</b> APH phosphotransferases   |
| 13 | <a href="#">c3i0oA_</a> | Alignment |    | 98.8 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> spectinomycin phosphotransferase;<br><b>PDBTitle:</b> crystal structure of spectinomycin phosphotransferase,2 aph(9)-ia, in complex with adp and spectinomycin  |
| 14 | <a href="#">c6fucA_</a> | Alignment |    | 98.7 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aminoglycoside phosphotransferase;<br><b>PDBTitle:</b> structure of aminoglycoside phosphotransferase aph(3"-id from2 streptomyces rimosus atcc10970  |
| 15 | <a href="#">d1j7la_</a> | Alignment |    | 98.7 | 9  | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)<br><b>Family:</b> APH phosphotransferases   |
| 16 | <a href="#">c5igwA_</a> | Alignment |    | 98.7 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> macrolide 2'-phosphotransferase ii;<br><b>PDBTitle:</b> macrolide 2'-phosphotransferase type ii - complex with gdp and2 clarithromycin  |
| 17 | <a href="#">c3tdvB_</a> | Alignment |   | 98.6 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> gentamicin resistance protein;<br><b>PDBTitle:</b> structure of the gdp complex of wild-type aminoglycoside 2'-2 phosphotransferase-iiiia   |
| 18 | <a href="#">c5jy7K_</a> | Alignment |  | 98.6 | 18 | <b>PDB header:</b> isomerase/transferase<br><b>Chain:</b> K: <b>PDB Molecule:</b> maltokinase;<br><b>PDBTitle:</b> complex of mycobacterium smegmatis trehalose synthase with maltokinase   |
| 19 | <a href="#">c3lzhA_</a> | Alignment |  | 98.6 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aph(2'')-id/aph(2'')-iva;<br><b>PDBTitle:</b> crystal structure of aminoglycoside phosphotransferase aph(2'')-2 id/aph(2'')-iva   |
| 20 | <a href="#">c4h05B_</a> | Alignment |  | 98.6 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> aminoglycoside-o-phosphotransferase viii;<br><b>PDBTitle:</b> crystal structure of aminoglycoside-3'-phosphotransferase of type viii  |
| 21 | <a href="#">c3hamA_</a> | Alignment | not modelled  | 98.4 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aminoglycoside phosphotransferase;<br><b>PDBTitle:</b> structure of the gentamicin-aph(2'')-iia complex   |
| 22 | <a href="#">c5igrA_</a> | Alignment | not modelled  | 98.4 | 15 | <b>PDB header:</b> transferase/antibiotic<br><b>Chain:</b> A: <b>PDB Molecule:</b> macrolide 2'-phosphotransferase;<br><b>PDBTitle:</b> macrolide 2'-phosphotransferase type i - complex with gdp and2 oleandomycin   |
| 23 | <a href="#">c5uxbA_</a> | Alignment | not modelled  | 98.4 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> macrolide 2'-phosphotransferase mpph;<br><b>PDBTitle:</b> crystal structure of macrolide 2'-phosphotransferase mpph from2 brachy bacterium faecium, apoenzyme   |
| 24 | <a href="#">c4r77A_</a> | Alignment | not modelled  | 98.4 | 9  | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> choline kinase;<br><b>PDBTitle:</b> crystal structure of choline kinase lica from streptococcus pneumoniae  |
| 25 | <a href="#">c4o7oB_</a> | Alignment | not modelled  | 98.2 | 25 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> maltokinase;<br><b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis maltose kinase mak   |
| 26 | <a href="#">d2pula1</a> | Alignment | not modelled  | 98.2 | 12 | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)<br><b>Family:</b> APH phosphotransferases   |
| 27 | <a href="#">c4wzyA_</a> | Alignment | not modelled  | 98.2 | 22 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> maltokinase;<br><b>PDBTitle:</b> structure of mycobacterial maltokinase, the missing link in the2 essential glge-pathway (atp complex)  |
| 28 | <a href="#">c4orkB_</a> | Alignment | not modelled  | 98.1 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> bifunctional aac/aph;<br><b>PDBTitle:</b> crystal structure of the phosphotransferase domain of the bifunctional2 aminoglycoside resistance enzyme aac(6')-ie-aph(2'')-ia<br><b>PDB header:</b> isomerase/transferase |

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|----|-------------------------|-----------|--------------|------|----|---|
| 29 | <a href="#">c5jy7I_</a> | Alignment | not modelled | 98.1 | 21 | <b>Chain:</b> I; <b>PDB Molecule:</b> maltokinase;<br><b>PDBTitle:</b> complex of mycobacterium smegmatis trehalose synthase with maltokinase   |
| 30 | <a href="#">c3attA_</a> | Alignment | not modelled | 98.1 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> putative uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of rv3168 with atp  |
| 31 | <a href="#">c3r78B_</a> | Alignment | not modelled | 98.0 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> aminoglycoside 3'-phosphotransferase apha1-1ab;<br><b>PDBTitle:</b> crystal structure of the aminoglycoside phosphotransferase aph(3')-ia,2 atp-bound   |
| 32 | <a href="#">c3csvA_</a> | Alignment | not modelled | 98.0 | 8  | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> aminoglycoside phosphotransferase;<br><b>PDBTitle:</b> crystal structure of a putative aminoglycoside phosphotransferase2 (yp_614837.1) from silicibacter sp. tm1040 at 2.15 a resolution     |
| 33 | <a href="#">c3f2rA_</a> | Alignment | not modelled | 97.6 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> choline kinase alpha;<br><b>PDBTitle:</b> crystal structure of human choline kinase alpha in complex with2 hemicholinium-3  |
| 34 | <a href="#">c2ig7A_</a> | Alignment | not modelled | 97.5 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> choline/ethanolamine kinase;<br><b>PDBTitle:</b> crystal structure of human choline kinase b  |
| 35 | <a href="#">c3mesB_</a> | Alignment | not modelled | 97.4 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> choline kinase;<br><b>PDBTitle:</b> crystal structure of choline kinase from cryptosporidium2 parvum iowa ii, cgd3_2030   |
| 36 | <a href="#">c3f2rB_</a> | Alignment | not modelled | 97.4 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> choline kinase alpha;<br><b>PDBTitle:</b> crystal structure of human choline kinase alpha in complex with2 hemicholinium-3  |
| 37 | <a href="#">c1nw1A_</a> | Alignment | not modelled | 97.4 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> choline kinase (49.2 kd);<br><b>PDBTitle:</b> crystal structure of choline kinase   |
| 38 | <a href="#">d1nw1a_</a> | Alignment | not modelled | 97.4 | 14 | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)<br><b>Family:</b> Choline kinase  |
| 39 | <a href="#">c2pywA_</a> | Alignment | not modelled | 97.3 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> structure of a. thaliana 5-methylthioribose kinase in complex with adp2 and mtr  |
| 40 | <a href="#">c3c5iD_</a> | Alignment | not modelled | 97.2 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> D; <b>PDB Molecule:</b> choline kinase;<br><b>PDBTitle:</b> crystal structure of plasmodium knowlesi choline kinase, pkh_134520   |
| 41 | <a href="#">c2ckpB_</a> | Alignment | not modelled | 96.2 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> choline kinase alpha;<br><b>PDBTitle:</b> crystal structure of human choline kinase alpha-2 in2 complex with adp  |
| 42 | <a href="#">c2ckpA_</a> | Alignment | not modelled | 96.1 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> choline kinase alpha;<br><b>PDBTitle:</b> crystal structure of human choline kinase alpha-2 in2 complex with adp  |
| 43 | <a href="#">c6hwlB_</a> | Alignment | not modelled | 91.9 | 29 | <b>PDB header:</b> transferase<br><b>Chain:</b> B; <b>PDB Molecule:</b> glucosamine kinase;<br><b>PDBTitle:</b> glucosamine kinase in complex with glucosamine, adp and inorganic2 phosphate  |
| 44 | <a href="#">c1zp9A_</a> | Alignment | not modelled | 91.9 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> rio1 kinase;<br><b>PDBTitle:</b> crystal structure of full-length a.fulgidus rio1 serine kinase bound2 to atp and mn2+ ions.  |
| 45 | <a href="#">c2qg7A_</a> | Alignment | not modelled | 90.6 | 22 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> ethanolamine kinase pv091845;<br><b>PDBTitle:</b> plasmodium vivax ethanolamine kinase pv091845   |
| 46 | <a href="#">c4pedA_</a> | Alignment | not modelled | 88.7 | 6  | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> chaperone activity of bc1 complex-like, mitochondrial;<br><b>PDBTitle:</b> mitochondrial adck3 employs an atypical protein kinase-like fold to2 enable coenzyme q biosynthes                  |
| 47 | <a href="#">c3byvA_</a> | Alignment | not modelled | 88.4 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> rhoptry kinase;<br><b>PDBTitle:</b> crystal structure of toxoplasma gondii specific rhoptry2 antigen kinase domain  |
| 48 | <a href="#">c1tqmA_</a> | Alignment | not modelled | 87.1 | 38 | <b>PDB header:</b> ribosome<br><b>Chain:</b> A; <b>PDB Molecule:</b> conserved hypothetical protein;<br><b>PDBTitle:</b> crystal structure of a. fulgidus rio2 serine protein kinase bound to2 amppnp   |
| 49 | <a href="#">c5yk2A_</a> | Alignment | not modelled | 86.9 | 33 | <b>PDB header:</b> transport protein<br><b>Chain:</b> A; <b>PDB Molecule:</b> probable conserved atp-binding protein abc transporter;<br><b>PDBTitle:</b> the complex structure of rv3197-erythromycin from mycobacterium2 tuberculosis                               |
| 50 | <a href="#">c3en9B_</a> | Alignment | not modelled | 86.3 | 30 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B; <b>PDB Molecule:</b> o-sialoglycoprotein endopeptidase/protein kinase;<br><b>PDBTitle:</b> structure of the methanococcus jannaschii kae1-bud32 fusion2 protein  |
| 51 | <a href="#">c6fdnA_</a> | Alignment | not modelled | 84.8 | 20 | <b>PDB header:</b> nuclear protein<br><b>Chain:</b> A; <b>PDB Molecule:</b> serine/threonine-protein kinase rio2;<br><b>PDBTitle:</b> rio2 structure  |
| 52 | <a href="#">c2pziA_</a> | Alignment | not modelled | 84.0 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> A; <b>PDB Molecule:</b> probable serine/threonine-protein kinase pkng;<br><b>PDBTitle:</b> crystal structure of protein kinase pkng from mycobacterium2 tuberculosis in complex with tetrahydrobenzothiophene ax20017 |
| 53 | <a href="#">d1zara2</a> | Alignment | not modelled | 84.0 | 38 | <b>Fold:</b> Protein kinase-like (PK-like)<br><b>Superfamily:</b> Protein kinase-like (PK-like)   |

|    |                         |           |              |      |    | Family:RIO1-like kinases   |
|----|-------------------------|-----------|--------------|------|----|--|
| 54 | <a href="#">c6g51v_</a> | Alignment | not modelled | 83.9 | 20 | <b>PDB header:</b> ribosome<br><b>Chain:</b> V: <b>PDB Molecule:</b> 40s ribosomal protein s21;<br><b>PDBTitle:</b> cryo-em structure of a late human pre-40s ribosomal subunit - state d  |
| 55 | <a href="#">c4ww7A_</a> | Alignment | not modelled | 83.2 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> ekc/keops complex subunit bud32;<br><b>PDBTitle:</b> crystal structure of binary complex bud32-cgi121 in complex with amp  |
| 56 | <a href="#">c4gygA_</a> | Alignment | not modelled | 81.3 | 36 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> rio2 kinase;<br><b>PDBTitle:</b> crystal structure of the rio2 kinase from chaetomium thermophilum   |
| 57 | <a href="#">c4azsA_</a> | Alignment | not modelled | 81.1 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> methyltransferase wbdd;<br><b>PDBTitle:</b> high resolution (2.2 a) crystal structure of wbdd.   |
| 58 | <a href="#">c4jrnA_</a> | Alignment | not modelled | 80.3 | 21 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> rhoptry kinase family protein;<br><b>PDBTitle:</b> rop18 kinase domain in complex with amp-pnp and sucrose   |
| 59 | <a href="#">c6emlr_</a> | Alignment | not modelled | 78.1 | 19 | <b>PDB header:</b> ribosome<br><b>Chain:</b> R: <b>PDB Molecule:</b> 40s ribosomal protein s2;<br><b>PDBTitle:</b> cryo-em structure of a late pre-40s ribosomal subunit from <i>Saccharomyces cerevisiae</i>  |
| 60 | <a href="#">c4bvua_</a> | Alignment | not modelled | 78.1 | 24 | <b>PDB header:</b> transferase/ligase/protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein kinase ospg;<br><b>PDBTitle:</b> structure of shigella effector ospg in complex with host ubch5c-2 ubiquitin conjugate  |
| 61 | <a href="#">c4azwA_</a> | Alignment | not modelled | 77.5 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> wbdd;<br><b>PDBTitle:</b> crystal structure of monomeric wbdd.   |
| 62 | <a href="#">c3dzoA_</a> | Alignment | not modelled | 77.1 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> rhoptry kinase domain;<br><b>PDBTitle:</b> crystal structure of a rhoptry kinase from <i>Toxoplasma gondii</i>   |
| 63 | <a href="#">c4ci6B_</a> | Alignment | not modelled | 76.8 | 20 | <b>PDB header:</b> transferase/structural protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> protein kinase yopo;<br><b>PDBTitle:</b> mechanisms of crippling actin-dependent phagocytosis by yopo   |
| 64 | <a href="#">c6df1A_</a> | Alignment | not modelled | 76.4 | 18 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> lipopolysaccharide core heptose(i) kinase rfap;<br><b>PDBTitle:</b> waap in complex with acyl carrier protein  |
| 65 | <a href="#">c3q60A_</a> | Alignment | not modelled | 75.4 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> rop5b;<br><b>PDBTitle:</b> crystal structure of virulent allele rop5b pseudokinase domain bound2 to atp  |
| 66 | <a href="#">c5dfzB_</a> | Alignment | not modelled | 74.7 | 21 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein kinase vps15;<br><b>PDBTitle:</b> structure of vps34 complex ii from <i>S. cerevisiae</i> .   |
| 67 | <a href="#">c2yleA_</a> | Alignment | not modelled | 73.1 | 15 | <b>PDB header:</b> actin-binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein spire homolog 1;<br><b>PDBTitle:</b> crystal structure of the human spir-1 kind fsi domain in2 complex with the fsi peptide  |
| 68 | <a href="#">c5ckwA_</a> | Alignment | not modelled | 73.1 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> legk4;<br><b>PDBTitle:</b> crystal structure of legk4_ amppnp kinase   |
| 69 | <a href="#">c5clrB_</a> | Alignment | not modelled | 73.0 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> legk4;<br><b>PDBTitle:</b> crystal structure of legk4_ apo kinase  |
| 70 | <a href="#">c4otpA_</a> | Alignment | not modelled | 72.5 | 30 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase rio1;<br><b>PDBTitle:</b> crystal structure of the catalytic domain of the human riok1 atypical2 protein kinase in complex with adp/mg2+   |
| 71 | <a href="#">c6g4jA_</a> | Alignment | not modelled | 70.5 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable serine/threonine-protein kinase yabt;<br><b>PDBTitle:</b> structure of the protein kinase yabt from <i>Bacillus subtilis</i> in complex2 with an alpharep crystallization helper                        |
| 72 | <a href="#">c6m7zE_</a> | Alignment | not modelled | 70.2 | 10 | <b>PDB header:</b> transferase<br><b>Chain:</b> E: <b>PDB Molecule:</b> bradyzoite pseudokinase 1;<br><b>PDBTitle:</b> a divergent kinase lacking the glycine-rich loop regulates membrane2 ultrastructure of the <i>Toxoplasma parasitophorous vacuole</i>                              |
| 73 | <a href="#">c4o96D_</a> | Alignment | not modelled | 70.2 | 20 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> D: <b>PDB Molecule:</b> type iii effector protein kinase;<br><b>PDBTitle:</b> 2.60 angstrom resolution crystal structure of a protein kinase domain2 of type iii effector nleh2 (ecs1814) from <i>Escherichia coli</i> o157:h73 str. sakai |
| 74 | <a href="#">c4im2A_</a> | Alignment | not modelled | 70.1 | 24 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase tbk1;<br><b>PDBTitle:</b> structure of tank-binding kinase 1   |
| 75 | <a href="#">c3c4wB_</a> | Alignment | not modelled | 67.4 | 19 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> rhodopsin kinase;<br><b>PDBTitle:</b> crystal structure of g protein coupled receptor kinase 1 bound to atp2 and magnesium chloride at 2.7a  |
| 76 | <a href="#">c4uw0A_</a> | Alignment | not modelled | 65.0 | 17 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> wbdd;<br><b>PDBTitle:</b> low resolution structure of wbdd with c-terminal bundle ordered to2 residue 505  |
| 77 | <a href="#">c3nyoB_</a> | Alignment | not modelled | 64.2 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> g protein-coupled receptor kinase 6;<br><b>PDBTitle:</b> crystal structure of g protein-coupled receptor kinase 6 in complex2 with amp   |
| 78 | <a href="#">c4ix5B_</a> | Alignment | not modelled | 64.1 | 13 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> msstt7d protein;<br><b>PDBTitle:</b> crystal structure of a stt7 homolog from <i>Micromonas</i> algae in complex2 with amp-pnp   |

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| 79  | <a href="#">c3e7eA_</a> | Alignment | not modelled | 61.3 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> mitotic checkpoint serine/threonine-protein kinase bub1;<br><b>PDBTitle:</b> structure and substrate recruitment of the human spindle checkpoint2 kinase bub  |
| 80  | <a href="#">c6bhC_</a>  | Alignment | not modelled | 60.5 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> pseudopodium-enriched atypical kinase 1;<br><b>PDBTitle:</b> crystal structure of pseudokinase peak1 (sugen kinase 269)   |
| 81  | <a href="#">c6eqiC_</a> | Alignment | not modelled | 58.2 | 32 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> serine/threonine-protein kinase pink1, putative;<br><b>PDBTitle:</b> structure of pink1 bound to ubiquitin  |
| 82  | <a href="#">c5nclA_</a> | Alignment | not modelled | 57.4 | 12 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase cbk1;<br><b>PDBTitle:</b> crystal structure of the cbk1-mob2 kinase-coactivator complex with an2 ssd1 peptide   |
| 83  | <a href="#">c2acxB_</a> | Alignment | not modelled | 57.0 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> g protein-coupled receptor kinase 6;<br><b>PDBTitle:</b> crystal structure of g protein coupled receptor kinase 6 bound to2 amppnp  |
| 84  | <a href="#">c4myiA_</a> | Alignment | not modelled | 56.9 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> cgmp-dependent protein kinase, putative;<br><b>PDBTitle:</b> crystal structure of pvx_084705  |
| 85  | <a href="#">c1ym7C_</a> | Alignment | not modelled | 55.6 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> beta-adrenergic receptor kinase 1;<br><b>PDBTitle:</b> g protein-coupled receptor kinase 2 (grk2)   |
| 86  | <a href="#">c4wb7B_</a> | Alignment | not modelled | 54.2 | 24 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> B: <b>PDB Molecule:</b> dnaj homolog subfamily b member 1,camp-dependent protein<br><b>PDBTitle:</b> crystal structure of a chimeric fusion of human dnaj (hsp40) and camp-2 dependent protein kinase a (catalytic alpha subunit)                       |
| 87  | <a href="#">c4yhjA_</a> | Alignment | not modelled | 53.8 | 21 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> g protein-coupled receptor kinase 4;<br><b>PDBTitle:</b> structure and function of the hypertension variant a486v of g protein-2 coupled receptor kinase 4 (grk4)   |
| 88  | <a href="#">c4oauC_</a> | Alignment | not modelled | 53.7 | 11 | <b>PDB header:</b> hydrolase/rna<br><b>Chain:</b> C: <b>PDB Molecule:</b> 2-5a-dependent ribonuclease;<br><b>PDBTitle:</b> complete human rnase l in complex with biological activators.  |
| 89  | <a href="#">c4wnkA_</a> | Alignment | not modelled | 53.4 | 24 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> g protein-coupled receptor kinase 5;<br><b>PDBTitle:</b> crystal structure of bovine g protein coupled-receptor kinase 5 in2 complex with ccg215022  |
| 90  | <a href="#">c3tkuB_</a> | Alignment | not modelled | 50.7 | 24 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein kinase mrck beta;<br><b>PDBTitle:</b> mrck beta in complex with fasudil  |
| 91  | <a href="#">c2j0kB_</a> | Alignment | not modelled | 50.3 | 22 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> focal adhesion kinase 1;<br><b>PDBTitle:</b> crystal structure of a fragment of focal adhesion kinase containing2 the ferm and kinase domains.  |
| 92  | <a href="#">c4btfA_</a> | Alignment | not modelled | 49.9 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> mixed lineage kinase domain-like protein;<br><b>PDBTitle:</b> structure of mlkl   |
| 93  | <a href="#">c3c4yA_</a> | Alignment | not modelled | 49.6 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> rhodopsin kinase;<br><b>PDBTitle:</b> crystal structure of apo form of g protein coupled receptor kinase 12 at 7.51a  |
| 94  | <a href="#">c2vuwA_</a> | Alignment | not modelled | 48.8 | 19 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase haspin;<br><b>PDBTitle:</b> structure of human haspin kinase domain   |
| 95  | <a href="#">c3otvC_</a> | Alignment | not modelled | 48.6 | 12 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> probable conserved transmembrane protein;<br><b>PDBTitle:</b> crystal structure of the intracellular domain of rv3910 from2 mycobacterium tuberculosis  |
| 96  | <a href="#">c5uuuA_</a> | Alignment | not modelled | 45.4 | 24 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> A: <b>PDB Molecule:</b> beta-adrenergic receptor kinase 1;<br><b>PDBTitle:</b> design, synthesis, and evaluation of the first selective and potent g-2 protein-coupled receptor kinase 2 (grk2) inhibitor for the potential3 treatment of heart failure |
| 97  | <a href="#">c6ccfB_</a> | Alignment | not modelled | 43.8 | 24 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> B: <b>PDB Molecule:</b> calcium/calmodulin-dependent protein kinase kinase 1;<br><b>PDBTitle:</b> crystal structure of the human camkk1a in complex with hesperadin   |
| 98  | <a href="#">c2rsvA_</a> | Alignment | not modelled | 42.9 | 28 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase vrk1;<br><b>PDBTitle:</b> solution structure of human full-length vaccinia related kinase 12 (vrk1)   |
| 99  | <a href="#">c5oatF_</a> | Alignment | not modelled | 41.3 | 33 | <b>PDB header:</b> kinase<br><b>Chain:</b> F: <b>PDB Molecule:</b> serine/threonine-protein kinase pink1, mitochondrial-like<br><b>PDBTitle:</b> pink1 structure  |
| 100 | <a href="#">c4c0tA_</a> | Alignment | not modelled | 40.8 | 32 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> likely protein kinase;<br><b>PDBTitle:</b> candida albicans pkh kinase domain   |
| 101 | <a href="#">c3qa8H_</a> | Alignment | not modelled | 40.4 | 21 | <b>PDB header:</b> immune system, signaling protein<br><b>Chain:</b> H: <b>PDB Molecule:</b> mgc80376 protein;<br><b>PDBTitle:</b> crystal structure of inhibitor of kappa b kinase beta  |
| 102 | <a href="#">c2jiiA_</a> | Alignment | not modelled | 40.3 | 11 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase vrk3 molecule: vaccinia<br><b>PDBTitle:</b> structure of vaccinia related kinase 3  |
| 103 | <a href="#">c3qa8A_</a> | Alignment | not modelled | 40.1 | 21 | <b>PDB header:</b> immune system, signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> mgc80376 protein;<br><b>PDBTitle:</b> crystal structure of inhibitor of kappa b kinase beta  |

|     |                         |           |              |      |    |   |
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| 104 | <a href="#">c2vwiC</a>  | Alignment | not modelled | 39.9 | 28 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> serine/threonine-protein kinase osr1;<br><b>PDBTitle:</b> structure of the osr1 kinase, a hypertension drug target  |
| 105 | <a href="#">c5ebzF</a>  | Alignment | not modelled | 38.1 | 15 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> F: <b>PDB Molecule:</b> inhibitor of nuclear factor kappa-b kinase subunit alpha;<br><b>PDBTitle:</b> crystal structure of human ikk1   |
| 106 | <a href="#">c3vwaA</a>  | Alignment | not modelled | 37.7 | 17 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> cytoplasmic export protein 1;<br><b>PDBTitle:</b> crystal structure of cex1p  |
| 107 | <a href="#">c4oliA</a>  | Alignment | not modelled | 34.8 | 18 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> non-receptor tyrosine-protein kinase tyk2;<br><b>PDBTitle:</b> the pseudokinase/kinase protein from jak-family member tyk2  |
| 108 | <a href="#">c4eutA</a>  | Alignment | not modelled | 34.2 | 15 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase tbk1;<br><b>PDBTitle:</b> structure of bx-795 complexed with unphosphorylated human tbk1 kinase-2 uld domain  |
| 109 | <a href="#">c4umkA</a>  | Alignment | not modelled | 32.1 | 26 | <b>PDB header:</b> dna binding protein/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable chromosome-partitioning protein parb;<br><b>PDBTitle:</b> the complex of spo0j and pars dna in chromosomal partition system  |
| 110 | <a href="#">c3op5B</a>  | Alignment | not modelled | 31.8 | 28 | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein kinase vrk1;<br><b>PDBTitle:</b> human vaccinia-related kinase 1   |
| 111 | <a href="#">c4i6hA</a>  | Alignment | not modelled | 29.8 | 21 | <b>PDB header:</b> transferase/transferase inhibitor<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase plk2;<br><b>PDBTitle:</b> selective & brain-permeable polo-like kinase-2 (plk-2) inhibitors that2 reduce alpha-synuclein phosphorylation in rat brain |
| 112 | <a href="#">c3ckxA</a>  | Alignment | not modelled | 29.8 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase 24;<br><b>PDBTitle:</b> crystal structure of sterile 20-like kinase 3 (mst3, stk24) in complex2 with staurosporine  |
| 113 | <a href="#">c6jkmA</a>  | Alignment | not modelled | 29.6 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> mitotic checkpoint control protein kinase bub1;<br><b>PDBTitle:</b> crystal structure of bubr1 kinase domain  |
| 114 | <a href="#">c4y93A</a>  | Alignment | not modelled | 28.4 | 24 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> non-specific protein-tyrosine kinase,non-specific protein-<br><b>PDBTitle:</b> crystal structure of the ph-th-kinase construct of bruton's tyrosine2 kinase (btk)   |
| 115 | <a href="#">c2wu6A</a>  | Alignment | not modelled | 26.7 | 21 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dual specificity protein kinase clk3;<br><b>PDBTitle:</b> crystal structure of the human clk3 in complex with dki   |
| 116 | <a href="#">c4bwxB</a>  | Alignment | not modelled | 26.0 | 9  | <b>PDB header:</b> gene regulation<br><b>Chain:</b> B: <b>PDB Molecule:</b> pab-dependent poly(a)-specific ribonuclease subunit pan-3;<br><b>PDBTitle:</b> structure of neurospora crassa pan3 pseudokinase mutant  |
| 117 | <a href="#">d3boja1</a> | Alignment | not modelled | 25.7 | 50 | <b>Fold:</b> CdCA1 repeat-like<br><b>Superfamily:</b> CdCA1 repeat-like<br><b>Family:</b> CdCA1 repeat-like   |
| 118 | <a href="#">d3boea1</a> | Alignment | not modelled | 25.1 | 57 | <b>Fold:</b> CdCA1 repeat-like<br><b>Superfamily:</b> CdCA1 repeat-like<br><b>Family:</b> CdCA1 repeat-like   |
| 119 | <a href="#">c2ozoA</a>  | Alignment | not modelled | 24.3 | 28 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> tyrosine-protein kinase zap-70;<br><b>PDBTitle:</b> autoinhibited intact human zap-70   |
| 120 | <a href="#">c4czuC</a>  | Alignment | not modelled | 23.1 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> cbl-interacting serine/threonine-protein kinase 23;<br><b>PDBTitle:</b> crystal structure of the kinase domain of cipk23 t190d mutant   |