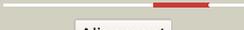
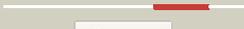
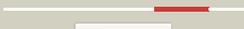
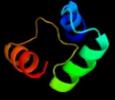
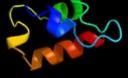


# Phyre2

|               |                                 |
|---------------|---------------------------------|
| Email         | mdejesus@rockefeller.edu        |
| Description   | RVBD1388_(mihF)_1563700_1564272 |
| Date          | Wed Jul 31 22:05:49 BST 2019    |
| Unique Job ID | 5870fc51a757caf2                |

Detailed template information

| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information  |
|----|-------------------------|---|---|------------|--------|---|
| 1  | <a href="#">c4itqA_</a> |  Alignment   |    | 100.0      | 57     | <b>PDB header:</b> gene regulation, structural protein/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein sco1480;<br><b>PDBTitle:</b> crystal structure of hypothetical protein sco1480 bound to dna  |
| 2  | <a href="#">d1i94m_</a> |  Alignment   |    | 96.3       | 24     | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Ribosomal protein S13   |
| 3  | <a href="#">d2uubm1</a> |  Alignment   |    | 96.3       | 26     | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Ribosomal protein S13   |
| 4  | <a href="#">c3iz6M_</a> |  Alignment   |    | 96.2       | 16     | <b>PDB header:</b> ribosome<br><b>Chain:</b> M: <b>PDB Molecule:</b> 40s ribosomal protein s18 (s13p);<br><b>PDBTitle:</b> localization of the small subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome                       |
| 5  | <a href="#">c2xznM_</a> |  Alignment |  | 96.2       | 20     | <b>PDB header:</b> ribosome<br><b>Chain:</b> M: <b>PDB Molecule:</b> rps18e;<br><b>PDBTitle:</b> crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2    |
| 6  | <a href="#">d2gy9m1</a> |  Alignment |  | 96.2       | 21     | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Ribosomal protein S13   |
| 7  | <a href="#">c5o5jM_</a> |  Alignment |  | 96.2       | 21     | <b>PDB header:</b> ribosome<br><b>Chain:</b> M: <b>PDB Molecule:</b> 30s ribosomal protein s13;<br><b>PDBTitle:</b> structure of the 30s small ribosomal subunit from mycobacterium2 smegmatis  |
| 8  | <a href="#">c2zkqm_</a> |  Alignment |  | 96.0       | 18     | <b>PDB header:</b> ribosomal protein/rna<br><b>Chain:</b> M: <b>PDB Molecule:</b><br><b>PDBTitle:</b> structure of a mammalian ribosomal 40s subunit within an 80s complex2 obtained by docking homology models of the rna and proteins into an3 8.7 a cryo-em map            |
| 9  | <a href="#">c3j200_</a> |  Alignment |  | 96.0       | 21     | <b>PDB header:</b> ribosome<br><b>Chain:</b> O: <b>PDB Molecule:</b> 30s ribosomal protein s13p;<br><b>PDBTitle:</b> promiscuous behavior of proteins in archaeal ribosomes revealed by2 cryo-em: implications for evolution of eukaryotic ribosomes (30s3 ribosomal subunit) |
| 10 | <a href="#">c5xyiS_</a> |  Alignment |  | 95.3       | 14     | <b>PDB header:</b> ribosome<br><b>Chain:</b> S: <b>PDB Molecule:</b> ribosomal protein s13p/s18e, putative;<br><b>PDBTitle:</b> small subunit of trichomonas vaginalis ribosome   |
| 11 | <a href="#">c5mmjm_</a> |  Alignment |  | 94.5       | 15     | <b>PDB header:</b> ribosome<br><b>Chain:</b> M: <b>PDB Molecule:</b><br><b>PDBTitle:</b> structure of the small subunit of the chloroplast ribosome   |

|    |                         |           |   |      |    |   |
|----|-------------------------|-----------|---|------|----|---|
| 12 | <a href="#">c3zeyM</a>  | Alignment |    | 94.5 | 18 | <b>PDB header:</b> ribosome<br><b>Chain:</b> M: <b>PDB Molecule:</b> 40s ribosomal protein s18, putative;<br><b>PDBTitle:</b> high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome                  |
| 13 | <a href="#">c3twkB</a>  | Alignment |    | 94.4 | 20 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> formamidopyrimidine-dna glycosylase 1;<br><b>PDBTitle:</b> crystal structure of arabidopsis thaliana fpg  |
| 14 | <a href="#">d2hkja1</a> | Alignment |    | 94.2 | 21 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Topoisomerase VI-B subunit middle domain  |
| 15 | <a href="#">d1r2za1</a> | Alignment |    | 93.8 | 19 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Middle domain of MutM-like DNA repair proteins  |
| 16 | <a href="#">c2f5qA</a>  | Alignment |    | 93.8 | 19 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> formamidopyrimidine-dna glycosidase;<br><b>PDBTitle:</b> catalytically inactive (e3q) mutm crosslinked to oxog:c2 containing dna cc2                        |
| 17 | <a href="#">d1tdza1</a> | Alignment |   | 93.2 | 15 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Middle domain of MutM-like DNA repair proteins  |
| 18 | <a href="#">d1ee8a1</a> | Alignment |  | 93.2 | 21 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Middle domain of MutM-like DNA repair proteins  |
| 19 | <a href="#">d1k82a1</a> | Alignment |  | 93.1 | 23 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Middle domain of MutM-like DNA repair proteins  |
| 20 | <a href="#">c1k82D</a>  | Alignment |  | 93.0 | 23 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> D: <b>PDB Molecule:</b> formamidopyrimidine-dna glycosylase;<br><b>PDBTitle:</b> crystal structure of e.coli formamidopyrimidine-dna2 glycosylase (fpg) covalently trapped with dna |
| 21 | <a href="#">c1ee8A</a>  | Alignment | not modelled  | 92.9 | 21 | <b>PDB header:</b> dna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> mutm (fpg) protein;<br><b>PDBTitle:</b> crystal structure of mutm (fpg) protein from thermus thermophilus hb8   |
| 22 | <a href="#">c3fhgA</a>  | Alignment | not modelled  | 92.3 | 11 | <b>PDB header:</b> dna repair, hydrolase, lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> n-glycosylase/dna lyase;<br><b>PDBTitle:</b> crystal structure of sulfobolus solfataricus 8-oxoguanine dna2 glycosylase (ssogg)              |
| 23 | <a href="#">c3w0fA</a>  | Alignment | not modelled  | 91.9 | 24 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease 8-like 3;<br><b>PDBTitle:</b> crystal structure of mouse endonuclease viii-like 3 (mnei3)  |
| 24 | <a href="#">c1nnjA</a>  | Alignment | not modelled  | 91.4 | 15 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> formamidopyrimidine-dna glycosylase;<br><b>PDBTitle:</b> crystal structure complex between the lactococcus lactis fpg and an2 abasic site containing dna        |
| 25 | <a href="#">d2aq0a1</a> | Alignment | not modelled  | 90.5 | 17 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Hef domain-like  |
| 26 | <a href="#">c1s5lu</a>  | Alignment | not modelled  | 90.1 | 19 | <b>PDB header:</b> photosynthesis<br><b>Chain:</b> U: <b>PDB Molecule:</b> photosystem ii 12 kda extrinsic protein;<br><b>PDBTitle:</b> architecture of the photosynthetic oxygen evolving center                                     |
| 27 | <a href="#">c3a46B</a>  | Alignment | not modelled  | 88.1 | 24 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> formamidopyrimidine-dna glycosylase;<br><b>PDBTitle:</b> crystal structure of mvnei1/thf complex  |
| 28 | <a href="#">d1x2ia1</a> | Alignment | not modelled  | 87.9 | 20 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Hef domain-like  |
|    |                         |           |   |      |    | <b>PDB header:</b> hydrolase, lyase   |

|    |                         |           |              |      |    |   |
|----|-------------------------|-----------|--------------|------|----|---|
| 29 | <a href="#">c3n0uB</a>  | Alignment | not modelled | 87.2 | 16 | <b>Chain:</b> B: <b>PDB Molecule:</b> probable n-glycosylase/dna lyase; <b>PDBTitle:</b> crystal structure of tm1821, the 8-oxoguanine dna glycosylase of <i>Thermotoga maritima</i>  |
| 30 | <a href="#">d2axtu1</a> | Alignment | not modelled | 87.0 | 19 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> PsbU/PolX domain-like<br><b>Family:</b> PsbU-like   |
| 31 | <a href="#">d1cuka2</a> | Alignment | not modelled | 86.6 | 22 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> DNA helicase RuvA subunit, middle domain   |
| 32 | <a href="#">c2opfA</a>  | Alignment | not modelled | 86.0 | 22 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease viii;<br><b>PDBTitle:</b> crystal structure of the dna repair enzyme endonuclease-viii (nei)2 from <i>E. coli</i> (r252a) in complex with ap-site containing dna substrate   |
| 33 | <a href="#">d1k3xa1</a> | Alignment | not modelled | 85.9 | 21 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Middle domain of MutM-like DNA repair proteins  |
| 34 | <a href="#">c3s6iA</a>  | Alignment | not modelled | 84.1 | 9  | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna-3-methyladenine glycosylase 1;<br><b>PDBTitle:</b> schizosaccharomyces pombe 3-methyladenine dna glycosylase (mag1) in2 complex with abasic-dna.  |
| 35 | <a href="#">c1ixrA</a>  | Alignment | not modelled | 84.1 | 24 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> holliday junction dna helicase ruva;<br><b>PDBTitle:</b> ruva-ruvb complex  |
| 36 | <a href="#">d1kfta</a>  | Alignment | not modelled | 83.9 | 14 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Excinuclease UvrC C-terminal domain  |
| 37 | <a href="#">c1kftA</a>  | Alignment | not modelled | 83.9 | 14 | <b>PDB header:</b> dna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> excinuclease abc subunit c;<br><b>PDBTitle:</b> solution structure of the c-terminal domain of uvrC from <i>E. coli</i>   |
| 38 | <a href="#">d2bgwa1</a> | Alignment | not modelled | 82.5 | 20 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Hef domain-like  |
| 39 | <a href="#">c4b24A</a>  | Alignment | not modelled | 81.6 | 7  | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable dna-3-methyladenine glycosylase 2;<br><b>PDBTitle:</b> unprecedented sculpting of dna at abasic sites by dna glycosylase2 homolog mag2   |
| 40 | <a href="#">c2bhnD</a>  | Alignment | not modelled | 81.5 | 19 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> D: <b>PDB Molecule:</b> xpf endonuclease;<br><b>PDBTitle:</b> xpf from <i>Aeropyrum pernix</i>  |
| 41 | <a href="#">c4bxoA</a>  | Alignment | not modelled | 81.1 | 4  | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> fanconi anemia group m protein;<br><b>PDBTitle:</b> architecture and dna recognition elements of the fanconi anemia fancm-2 faap24 complex  |
| 42 | <a href="#">c4mb7A</a>  | Alignment | not modelled | 80.4 | 21 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease 8-like l720;<br><b>PDBTitle:</b> crystal structure of a viral dna glycosylase  |
| 43 | <a href="#">d2duya1</a> | Alignment | not modelled | 80.1 | 24 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> ComEA-like   |
| 44 | <a href="#">d1ixra1</a> | Alignment | not modelled | 79.6 | 24 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> DNA helicase RuvA subunit, middle domain   |
| 45 | <a href="#">d2a1jb1</a> | Alignment | not modelled | 79.0 | 23 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Hef domain-like  |
| 46 | <a href="#">d1bvsa2</a> | Alignment | not modelled | 78.3 | 26 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> DNA helicase RuvA subunit, middle domain   |
| 47 | <a href="#">c2ihmA</a>  | Alignment | not modelled | 77.6 | 13 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase mu;<br><b>PDBTitle:</b> polymerase mu in ternary complex with gapped 11mer dna duplex and2 bound incoming nucleotide   |
| 48 | <a href="#">d2edua1</a> | Alignment | not modelled | 77.4 | 27 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> ComEA-like   |
| 49 | <a href="#">d1dgsa1</a> | Alignment | not modelled | 77.3 | 25 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> NAD+-dependent DNA ligase, domain 3  |
| 50 | <a href="#">c8icza</a>  | Alignment | not modelled | 76.1 | 14 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein (dna polymerase beta (e.c.2.7.7.7));<br><b>PDBTitle:</b> dna polymerase beta (pol b) (e.c.2.7.7.7) complexed with2 seven base pairs of dna; soaked in the presence of of datp3 (1 millimolar), mnc12 (5 millimolar), and lithium sulfate4 (75 millimolar) |
| 51 | <a href="#">c2lyhA</a>  | Alignment | not modelled | 75.9 | 29 | <b>PDB header:</b> dna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> fanconi anemia-associated protein of 24 kda;<br><b>PDBTitle:</b> structure of faap24 residues 141-215   |
| 52 | <a href="#">c2h5xA</a>  | Alignment | not modelled | 75.4 | 26 | <b>PDB header:</b> dna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> holliday junction atp-dependent dna helicase ruva;<br><b>PDBTitle:</b> ruva from <i>Mycobacterium tuberculosis</i>  |
| 53 | <a href="#">c4p4oA</a>  | Alignment | not modelled | 74.7 | 21 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase beta;<br><b>PDBTitle:</b> crystal structure of leishmania infantum polymerase beta: ternary gap2 complex   |
| 54 | <a href="#">c3mr2A</a>  | Alignment | not modelled | 74.6 | 18 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase eta;<br><b>PDBTitle:</b> human dna polymerase eta in complex with normal dna and incoming2 nucleotide (nrm)  |

|    |                         |           |              |      |    |  |
|----|-------------------------|-----------|--------------|------|----|--|
| 55 | <a href="#">c4bxoB</a>  | Alignment | not modelled | 73.6 | 29 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> B: <b>PDB Molecule:</b> fanconi anemia-associated protein of 24 kda;<br><b>PDBTitle:</b> architecture and dna recognition elements of the fanconi anemia fancm-2 faap24 complex            |
| 56 | <a href="#">c1d8IA</a>  | Alignment | not modelled | 73.0 | 22 | <b>PDB header:</b> gene regulation<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein (holliday junction dna helicase ruva);<br><b>PDBTitle:</b> e. coli holliday junction binding protein ruva nh2 region lacking2 domain iii                 |
| 57 | <a href="#">c6erpJ</a>  | Alignment | not modelled | 72.8 | 13 | <b>PDB header:</b> transcription<br><b>Chain:</b> J: <b>PDB Molecule:</b> dimethyladenosine transferase 2, mitochondrial;<br><b>PDBTitle:</b> structure of the human mitochondrial transcription initiation complex2 at the lsp promoter     |
| 58 | <a href="#">c2mutA</a>  | Alignment | not modelled | 72.6 | 23 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna excision repair protein ercc-1;<br><b>PDBTitle:</b> solution structure of the f231l mutant ercc1-xpf dimerization region   |
| 59 | <a href="#">c2yg8B</a>  | Alignment | not modelled | 72.3 | 21 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna-3-methyladenine glycosidase ii, putative;<br><b>PDBTitle:</b> structure of an unusual 3-methyladenine dna glycosylase ii (alka) from2 deinococcus radiodurans      |
| 60 | <a href="#">c3f10A</a>  | Alignment | not modelled | 72.0 | 28 | <b>PDB header:</b> hydrolase, lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 8-oxoguanine-dna-glycosylase;<br><b>PDBTitle:</b> crystal structure of clostridium acetobutylicum 8-oxoguanine dna2 glycosylase in complex with 8-oxoguanosine  |
| 61 | <a href="#">c1hjpA</a>  | Alignment | not modelled | 70.3 | 22 | <b>PDB header:</b> dna recombination<br><b>Chain:</b> A: <b>PDB Molecule:</b> ruva;<br><b>PDBTitle:</b> holliday junction binding protein ruva from e. coli  |
| 62 | <a href="#">d1szpa1</a> | Alignment | not modelled | 67.3 | 20 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> Rad51 N-terminal domain-like<br><b>Family:</b> DNA repair protein Rad51, N-terminal domain   |
| 63 | <a href="#">d1t94a2</a> | Alignment | not modelled | 66.4 | 26 | <b>Fold:</b> DNA/RNA polymerases<br><b>Superfamily:</b> DNA/RNA polymerases<br><b>Family:</b> Lesion bypass DNA polymerase (Y-family), catalytic domain  |
| 64 | <a href="#">d2a1ja1</a> | Alignment | not modelled | 66.3 | 17 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Hef domain-like   |
| 65 | <a href="#">c3auoB</a>  | Alignment | not modelled | 66.1 | 20 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna polymerase beta family (x family);<br><b>PDBTitle:</b> dna polymerase x from thermus thermophilus hb8 ternary complex with 1-2 nt gapped dna and ddgtp       |
| 66 | <a href="#">c1kdhA</a>  | Alignment | not modelled | 65.1 | 14 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> terminal deoxynucleotidyltransferase short<br><b>PDBTitle:</b> binary complex of murine terminal deoxynucleotidyl2 transferase with a primer single stranded dna |
| 67 | <a href="#">c3epvB</a>  | Alignment | not modelled | 64.3 | 16 | <b>PDB header:</b> metal binding protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> nickel and cobalt resistance protein cnrr;<br><b>PDBTitle:</b> x-ray structure of the metal-sensor cnrx in both the apo- and copper-2 bound forms          |
| 68 | <a href="#">c1mpgB</a>  | Alignment | not modelled | 63.0 | 26 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 3-methyladenine dna glycosylase ii;<br><b>PDBTitle:</b> 3-methyladenine dna glycosylase ii from escherichia coli   |
| 69 | <a href="#">c2zj8A</a>  | Alignment | not modelled | 62.8 | 24 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative ski2-type helicase;<br><b>PDBTitle:</b> archaeal dna helicase hjm apo state in form 2   |
| 70 | <a href="#">d1ul1x1</a> | Alignment | not modelled | 62.6 | 19 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> 5' to 3' exonuclease, C-terminal subdomain<br><b>Family:</b> 5' to 3' exonuclease, C-terminal subdomain  |
| 71 | <a href="#">c3n5nX</a>  | Alignment | not modelled | 62.6 | 35 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> X: <b>PDB Molecule:</b> a/g-specific adenine dna glycosylase;<br><b>PDBTitle:</b> crystal structure analysis of the catalytic domain and interdomain2 connector of human muty homologue        |
| 72 | <a href="#">d1rxwa1</a> | Alignment | not modelled | 62.1 | 19 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> 5' to 3' exonuclease, C-terminal subdomain<br><b>Family:</b> 5' to 3' exonuclease, C-terminal subdomain  |
| 73 | <a href="#">c1ixrB</a>  | Alignment | not modelled | 61.8 | 26 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> holliday junction dna helicase ruva;<br><b>PDBTitle:</b> ruva-ruvb complex   |
| 74 | <a href="#">d1a77a1</a> | Alignment | not modelled | 60.9 | 18 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> 5' to 3' exonuclease, C-terminal subdomain<br><b>Family:</b> 5' to 3' exonuclease, C-terminal subdomain  |
| 75 | <a href="#">c2nrzB</a>  | Alignment | not modelled | 59.5 | 14 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> uvrabc system protein c;<br><b>PDBTitle:</b> crystal structure of the c-terminal half of uvrc bound to its2 catalytic divalent cation                                  |
| 76 | <a href="#">c2bcuA</a>  | Alignment | not modelled | 59.1 | 16 | <b>PDB header:</b> transferase, lyase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase lambda;<br><b>PDBTitle:</b> dna polymerase lambda in complex with a dna duplex2 containing an unpaired damp and a tt mismatch              |
| 77 | <a href="#">c1mx0D</a>  | Alignment | not modelled | 58.5 | 21 | <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   |
| 78 | <a href="#">c2csdB</a>  | Alignment | not modelled | 56.4 | 15 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> topoisomerase v;<br><b>PDBTitle:</b> crystal structure of topoisomerase v (61 kda fragment)  |
| 79 | <a href="#">d2p6ra2</a> | Alignment | not modelled | 55.6 | 16 | <b>Fold:</b> Sec63 N-terminal domain-like<br><b>Superfamily:</b> Sec63 N-terminal domain-like<br><b>Family:</b> Achaeal helicase C-terminal domain   |
|    |                         |           |              |      |    | <b>Fold:</b> SAM domain-like   |

|     |                         |           |              |      |    |  |
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| 80  | <a href="#">d1szpb1</a> | Alignment | not modelled | 54.8 | 21 | <b>Superfamily:</b> Rad51 N-terminal domain-like<br><b>Family:</b> DNA repair protein Rad51, N-terminal domain   |
| 81  | <a href="#">c4l8iA</a>  | Alignment | not modelled | 54.2 | 14 | <b>PDB header:</b> immune system<br><b>Chain:</b> A: <b>PDB Molecule:</b> rsv epitope scaffold ffl_005;<br><b>PDBTitle:</b> crystal structure of rsv epitope scaffold ffl_005  |
| 82  | <a href="#">c3bbnM</a>  | Alignment | not modelled | 54.0 | 17 | <b>PDB header:</b> ribosome<br><b>Chain:</b> M: <b>PDB Molecule:</b> ribosomal protein s13;<br><b>PDBTitle:</b> homology model for the spinach chloroplast 30s subunit fitted to 9.4a2 cryo-em map of the 70s chlororibosome.  |
| 83  | <a href="#">d3bzka1</a> | Alignment | not modelled | 53.9 | 30 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> RuvA domain 2-like<br><b>Family:</b> Tex HhH-containing domain-like  |
| 84  | <a href="#">c1rrqA</a>  | Alignment | not modelled | 53.9 | 16 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> muty;<br><b>PDBTitle:</b> muty adenine glycosylase in complex with dna containing an2 a:oxog pair  |
| 85  | <a href="#">c5o19A</a>  | Alignment | not modelled | 53.9 | 9  | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> transcription elongation factor, mitochondrial;<br><b>PDBTitle:</b> structure of human mitochondrial transcription elongation factor2 (tefm) n-terminal domain   |
| 86  | <a href="#">c4clvB</a>  | Alignment | not modelled | 53.6 | 14 | <b>PDB header:</b> metal binding protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> nickel-cobalt-cadmium resistance protein nccx;<br><b>PDBTitle:</b> crystal structure of dodecylphosphocholine-solubilized nccx2 from cupriavidus metallidurans 31a                                   |
| 87  | <a href="#">c4unfA</a>  | Alignment | not modelled | 53.0 | 25 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease iii-1;<br><b>PDBTitle:</b> crystal structure of deinococcus radiodurans endonuclease iii-1  |
| 88  | <a href="#">d1mpga1</a> | Alignment | not modelled | 52.9 | 19 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase<br><b>Family:</b> DNA repair glycosylase, 2 C-terminal domains   |
| 89  | <a href="#">d1xo1a1</a> | Alignment | not modelled | 51.3 | 18 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> 5' to 3' exonuclease, C-terminal subdomain<br><b>Family:</b> 5' to 3' exonuclease, C-terminal subdomain  |
| 90  | <a href="#">c4ejyA</a>  | Alignment | not modelled | 51.2 | 21 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> 3-methyladenine dna glycosylase;<br><b>PDBTitle:</b> structure of mboggl1 in complex with high affinity dna ligand   |
| 91  | <a href="#">d1b43a1</a> | Alignment | not modelled | 50.5 | 29 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> 5' to 3' exonuclease, C-terminal subdomain<br><b>Family:</b> 5' to 3' exonuclease, C-terminal subdomain  |
| 92  | <a href="#">c1b22A</a>  | Alignment | not modelled | 50.1 | 20 | <b>PDB header:</b> dna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna repair protein rad51;<br><b>PDBTitle:</b> rad51 (n-terminal domain)  |
| 93  | <a href="#">d1b22a</a>  | Alignment | not modelled | 50.1 | 20 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> Rad51 N-terminal domain-like<br><b>Family:</b> DNA repair protein Rad51, N-terminal domain   |
| 94  | <a href="#">d1mc8a1</a> | Alignment | not modelled | 49.9 | 29 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> 5' to 3' exonuclease, C-terminal subdomain<br><b>Family:</b> 5' to 3' exonuclease, C-terminal subdomain  |
| 95  | <a href="#">d1kg2a</a>  | Alignment | not modelled | 49.9 | 39 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase<br><b>Family:</b> Mismatch glycosylase   |
| 96  | <a href="#">c4uobA</a>  | Alignment | not modelled | 49.3 | 30 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease iii-3;<br><b>PDBTitle:</b> crystal structure of deinococcus radiodurans endonuclease iii-3  |
| 97  | <a href="#">d1pu6a</a>  | Alignment | not modelled | 48.6 | 28 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase<br><b>Family:</b> 3-Methyladenine DNA glycosylase III (MagIII)   |
| 98  | <a href="#">c2ziuA</a>  | Alignment | not modelled | 47.8 | 17 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> mus81 protein;<br><b>PDBTitle:</b> crystal structure of the mus81-eme1 complex   |
| 99  | <a href="#">c2i5hA</a>  | Alignment | not modelled | 47.7 | 50 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein af1531;<br><b>PDBTitle:</b> crystal structure of af1531 from archaeoglobus fulgidus,2 pfam duf655   |
| 100 | <a href="#">d2i5ha1</a> | Alignment | not modelled | 47.7 | 50 | <b>Fold:</b> AF1531-like<br><b>Superfamily:</b> AF1531-like<br><b>Family:</b> AF1531-like  |
| 101 | <a href="#">d2ilqal</a> | Alignment | not modelled | 47.5 | 9  | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> Rad51 N-terminal domain-like<br><b>Family:</b> DNA repair protein Rad51, N-terminal domain   |
| 102 | <a href="#">d1pzna1</a> | Alignment | not modelled | 47.5 | 14 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> Rad51 N-terminal domain-like<br><b>Family:</b> DNA repair protein Rad51, N-terminal domain   |
| 103 | <a href="#">c1yqmA</a>  | Alignment | not modelled | 47.4 | 28 | <b>PDB header:</b> hydrolase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> n-glycosylase/dna lyase;<br><b>PDBTitle:</b> catalytically inactive human 8-oxoguanine glycosylase2 crosslinked to 7-deazaguanine containing dna   |
| 104 | <a href="#">c2jrtA</a>  | Alignment | not modelled | 47.4 | 29 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> nmr solution structure of the protein coded by gene2 rhos4_12090 of rhodobacter sphaeroides. northeast3 structural genomics target rhr5 |
| 105 | <a href="#">d1keaa</a>  | Alignment | not modelled | 46.0 | 33 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase<br><b>Family:</b> Mismatch glycosylase   |
| 106 | <a href="#">d1rrqa1</a> | Alignment | not modelled | 45.9 | 17 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase  |

|     |                         |           |              |      |    |  |
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|     |                         |           |              |      |    | <b>Family:</b> Mismatch glycosylase  |
| 107 | <a href="#">c3kntC_</a> | Alignment | not modelled | 45.9 | 17 | <b>PDB header:</b> hydrolase, lyase/dna<br><b>Chain:</b> C: <b>PDB Molecule:</b> n-glycosylase/dna lyase;<br><b>PDBTitle:</b> crystal structure of methanocaldococcus jannaschii 8-oxoguanine2 glycosylase/lyase in complex with 15mer dna containing 8-oxoguanine |
| 108 | <a href="#">d1orna_</a> | Alignment | not modelled | 45.4 | 33 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase<br><b>Family:</b> Endonuclease III   |
| 109 | <a href="#">d2abka_</a> | Alignment | not modelled | 45.3 | 50 | <b>Fold:</b> DNA-glycosylase<br><b>Superfamily:</b> DNA-glycosylase<br><b>Family:</b> Endonuclease III   |
| 110 | <a href="#">c2jhnB_</a> | Alignment | not modelled | 44.7 | 21 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 3-methyladenine dna-glycosylase;<br><b>PDBTitle:</b> 3-methyladenine dna-glycosylase from archaeoglobus fulgidus   |
| 111 | <a href="#">c1t3nB_</a> | Alignment | not modelled | 44.6 | 26 | <b>PDB header:</b> replication/dna<br><b>Chain:</b> B: <b>PDB Molecule:</b> polymerase (dna directed) iota;<br><b>PDBTitle:</b> structure of the catalytic core of dna polymerase iota in complex with2 dna and dttp   |
| 112 | <a href="#">c2oh2B_</a> | Alignment | not modelled | 43.8 | 26 | <b>PDB header:</b> transferase/dna<br><b>Chain:</b> B: <b>PDB Molecule:</b> dna polymerase kappa;<br><b>PDBTitle:</b> ternary complex of human dna polymerase  |
| 113 | <a href="#">c2owoA_</a> | Alignment | not modelled | 43.7 | 32 | <b>PDB header:</b> ligase/dna<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna ligase;<br><b>PDBTitle:</b> last stop on the road to repair: structure of e.coli dna ligase bound2 to nicked dna-adenylate  |
| 114 | <a href="#">d2vana1</a> | Alignment | not modelled | 41.8 | 18 | <b>Fold:</b> SAM domain-like<br><b>Superfamily:</b> PsbU/PoIX domain-like<br><b>Family:</b> DNA polymerase beta-like, second domain  |
| 115 | <a href="#">c5ituB_</a> | Alignment | not modelled | 41.1 | 26 | <b>PDB header:</b> dna binding protein/dna<br><b>Chain:</b> B: <b>PDB Molecule:</b> endonuclease 8-like 1;<br><b>PDBTitle:</b> crystal structure of human neil1(242k) bound to duplex dna containing2 thf  |
| 116 | <a href="#">d1jx4a2</a> | Alignment | not modelled | 41.0 | 21 | <b>Fold:</b> DNA/RNA polymerases<br><b>Superfamily:</b> DNA/RNA polymerases<br><b>Family:</b> Lesion bypass DNA polymerase (Y-family), catalytic domain  |
| 117 | <a href="#">d1tdha1</a> | Alignment | not modelled | 40.6 | 23 | <b>Fold:</b> S13-like H2TH domain<br><b>Superfamily:</b> S13-like H2TH domain<br><b>Family:</b> Middle domain of MutM-like DNA repair proteins   |
| 118 | <a href="#">d1eh1a_</a> | Alignment | not modelled | 38.8 | 39 | <b>Fold:</b> RRF/tRNA synthetase additional domain-like<br><b>Superfamily:</b> Ribosome recycling factor, RRF<br><b>Family:</b> Ribosome recycling factor, RRF   |
| 119 | <a href="#">d2oa4a1</a> | Alignment | not modelled | 37.9 | 18 | <b>Fold:</b> DNA/RNA-binding 3-helical bundle<br><b>Superfamily:</b> TrpR-like<br><b>Family:</b> SPO1678-like  |
| 120 | <a href="#">c1ut8B_</a> | Alignment | not modelled | 37.6 | 18 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> exodeoxyribonuclease;<br><b>PDBTitle:</b> divalent metal ions (zinc) bound to t5 5'-exonuclease  |