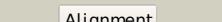
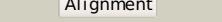
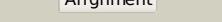
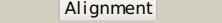
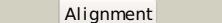
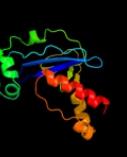
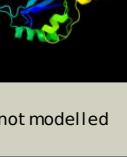


Phyre²

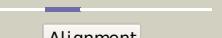
| | |
|---------------|-----------------------------|
| Email | I.a.kelley@imperial.ac.uk |
| Description | P0AEKO |
| Date | Thu Jan 5 11:23:32 GMT 2012 |
| Unique Job ID | c02656c0030affd4 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|---|
| 1 | d1y97a1 |  |  | 100.0 | 20 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 2 | d2gxfa1 |  |  | 100.0 | 20 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 3 | c3u6fA_ |  |  | 100.0 | 18 | PDB header: hydrolase/dna Chain: A: PDB Molecule: three prime repair exonuclease 1; PDBTitle: mouse trex1 d200n mutant |
| 4 | c1zbhA_ |  |  | 100.0 | 17 | PDB header: hydrolase/rna Chain: A: PDB Molecule: 3'-5' exonuclease eri1; PDBTitle: 3'-end specific recognition of histone mrna stem-loop by 3'-2 exonuclease |
| 5 | c1zbuB_ |  |  | 100.0 | 18 | PDB header: hydrolase Chain: B: PDB Molecule: 3'-5' exonuclease eri1; PDBTitle: crystal structure of full-length 3'-exonuclease |
| 6 | d2guia1 |  |  | 100.0 | 30 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 7 | c2p1jB_ |  |  | 100.0 | 34 | PDB header: transferase Chain: B: PDB Molecule: dna polymerase iii polc-type; PDBTitle: crystal structure of a polc-type dna polymerase iii exonuclease domain from thermotoga maritima |
| 8 | c3cm6A_ |  |  | 100.0 | 17 | PDB header: hydrolase, apoptosis Chain: A: PDB Molecule: cell death-related nuclease 4; PDBTitle: crystal structure of cell-death related nuclease 4 (crn-4)2 bound with er |
| 9 | d3b6oa1 |  |  | 100.0 | 16 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 10 | d1wlja_ |  |  | 100.0 | 20 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 11 | d1j9aa_ |  |  | 100.0 | 17 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |

| | | | | | | |
|----|-------------------------|-----------|---|-------|----|--|
| 12 | c3tr8A | Alignment |  | 100.0 | 17 | PDB header: hydrolase Chain: A: PDB Molecule: oligoribonuclease; PDBTitle: structure of an oligoribonuclease (orn) from coxiella burnetii |
| 13 | d1w0ha | Alignment |  | 100.0 | 16 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 14 | c2xriA | Alignment |  | 100.0 | 17 | PDB header: hydrolase Chain: A: PDB Molecule: eri1 exoribonuclease 3; PDBTitle: crystal structure of human eri1 exoribonuclease 3 |
| 15 | d2f96a1 | Alignment |  | 100.0 | 22 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 16 | d2igia1 | Alignment |  | 100.0 | 19 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 17 | c2gbzA | Alignment |  | 99.9 | 16 | PDB header: hydrolase Chain: A: PDB Molecule: oligoribonuclease; PDBTitle: the crystal structure of xc847 from xanthomonas campestris: a 3-52 oligoribonuclease of dnaq fold family with a novel opposingly-shifted3 helix |
| 18 | c2is3B | Alignment |  | 99.9 | 21 | PDB header: hydrolase Chain: B: PDB Molecule: ribonuclease t; PDBTitle: crystal structure of escherichia coli rnase t |
| 19 | d1uoca | Alignment |  | 99.4 | 9 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: CAF1-like ribonuclease |
| 20 | d1kfsa1 | Alignment |  | 99.1 | 19 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 21 | d2d5ra1 | Alignment | not modelled | 99.1 | 12 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: CAF1-like ribonuclease |
| 22 | d1x9ma1 | Alignment | not modelled | 99.1 | 20 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 23 | c2p51A | Alignment | not modelled | 99.0 | 15 | PDB header: hydrolase, gene regulation Chain: A: PDB Molecule: spcc18.06c protein; PDBTitle: crystal structure of the s. pombe pop2p deadenylation2 subunit |
| 24 | c2kzzA | Alignment | not modelled | 99.0 | 18 | PDB header: transferase/dna Chain: A: PDB Molecule: protein (dna polymerase i); PDBTitle: klenow fragment with normal substrate and zinc only |
| 25 | c1tk0A | Alignment | not modelled | 98.8 | 20 | PDB header: transferase/electron transport/dna Chain: A: PDB Molecule: dna polymerase; PDBTitle: t7 dna polymerase ternary complex with 8 oxo guanosine and2 ddctp at the insertion site |
| 26 | c1njzA | Alignment | not modelled | 98.8 | 14 | PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase i; PDBTitle: cytosine-thymine mismatch at the polymerase active site |
| 27 | c3d45B | Alignment | not modelled | 98.6 | 23 | PDB header: hydrolase Chain: B: PDB Molecule: poly(a)-specific ribonuclease parn; PDBTitle: crystal structure of mouse parn in complex with m7gpppg |
| 28 | d2hhva1 | Alignment | not modelled | 98.5 | 17 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 29 | c2a1sc | Alignment | not modelled | 98.5 | 23 | PDB header: hydrolase Chain: C: PDB Molecule: poly(a)-specific ribonuclease parn; |

| | | | | | PDBTitle: crystal structure of native parn nuclease domain | |
|----|-------------------------|-----------|--------------|------|---|---|
| 30 | d1d5aa1 | Alignment | not modelled | 98.0 | 18 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 31 | d1wn7a1 | Alignment | not modelled | 97.9 | 16 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 32 | c2gv9B_ | Alignment | not modelled | 97.9 | 12 | PDB header: transferase Chain: B: PDB Molecule: dna polymerase; PDBTitle: crystal structure of the herpes simplex virus type 1 dna polymerase |
| 33 | d1qhta1 | Alignment | not modelled | 97.9 | 17 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 34 | c1yt3A_ | Alignment | not modelled | 97.7 | 22 | PDB header: hydrolase,translation Chain: A: PDB Molecule: ribonuclease d; PDBTitle: crystal structure of escherichia coli rnase d, an2 exoribonuclease involved in structured rna processing |
| 35 | d1tgoa1 | Alignment | not modelled | 97.7 | 16 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 36 | d1noya_ | Alignment | not modelled | 97.6 | 16 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 37 | d1q8ia1 | Alignment | not modelled | 97.5 | 18 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 38 | c3iayA_ | Alignment | not modelled | 97.5 | 21 | PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase delta catalytic subunit; PDBTitle: ternary complex of dna polymerase delta |
| 39 | d1ih7a1 | Alignment | not modelled | 97.3 | 20 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 40 | c2e6mA_ | Alignment | not modelled | 97.3 | 12 | PDB header: hydrolase Chain: A: PDB Molecule: werner syndrome atp-dependent helicase homolog; PDBTitle: structure of mouse werner exonuclease domain |
| 41 | c2dtuA_ | Alignment | not modelled | 97.2 | 18 | PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase; PDBTitle: crystal structure of the beta hairpin loop deletion variant2 of rb69 gp43 in complex with dna containing an abasic site3 analog |
| 42 | c1d5aA_ | Alignment | not modelled | 97.1 | 16 | PDB header: transferase Chain: A: PDB Molecule: protein (dna polymerase); PDBTitle: crystal structure of an archaeabacterial dna polymerase2 d.tok. deposition of second native structure at 2.43 angstrom |
| 43 | c3cymA_ | Alignment | not modelled | 97.1 | 18 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein bad_0989; PDBTitle: crystal structure of protein bad_0989 from bifidobacterium2 adolescents |
| 44 | c2vwkA_ | Alignment | not modelled | 97.0 | 18 | PDB header: dna replication Chain: A: PDB Molecule: dna polymerase; PDBTitle: uracil recognition in archaeal dna polymerases captured by2 x-ray crystallography. v93q polymerase variant |
| 45 | d1yt3a3 | Alignment | not modelled | 96.9 | 21 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 46 | c1q8ia_ | Alignment | not modelled | 96.6 | 20 | PDB header: transferase Chain: A: PDB Molecule: dna polymerase ii; PDBTitle: crystal structure of escherichia coli dna polymerase ii |
| 47 | d1s5ja1 | Alignment | not modelled | 96.4 | 15 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 48 | c4ktqA_ | Alignment | not modelled | 96.4 | 16 | PDB header: transferase/dna Chain: A: PDB Molecule: protein (large fragment of dna polymerase i); PDBTitle: binary complex of the large fragment of dna polymerase i2 from t. aquaticus bound to a primer/template dna |
| 49 | d2hbka2 | Alignment | not modelled | 94.6 | 15 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 50 | d1vk0a_ | Alignment | not modelled | 93.0 | 17 | Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 51 | c1s5ja_ | Alignment | not modelled | 92.1 | 16 | PDB header: transferase Chain: A: PDB Molecule: dna polymerase i; PDBTitle: insight in dna replication: the crystal structure of dna2 polymerase b1 from the archaeon sulfolobus solfataricus |
| 52 | c3ikmD_ | Alignment | not modelled | 91.9 | 18 | PDB header: transferase Chain: D: PDB Molecule: dna polymerase subunit gamma-1; PDBTitle: crystal structure of human mitochondrial dna polymerase2 holoenzyme |
| 53 | c2hbkA_ | Alignment | not modelled | 85.4 | 20 | PDB header: hydrolase, gene regulation Chain: A: PDB Molecule: exosome complex exonuclease rrp6; PDBTitle: structure of the yeast nuclear exosome component, rrp6p2 reveals an interplay between the active site and the hrdc3 domain; protein in complex with mn |
| 54 | c3mx2A_ | Alignment | not modelled | 68.9 | 20 | PDB header: nuclear protein Chain: A: PDB Molecule: nucleoprotein; PDBTitle: lassa fever virus nucleoprotein complexed with dttp |
| 55 | c3q7cA_ | Alignment | not modelled | 68.4 | 20 | PDB header: hydrolase Chain: A: PDB Molecule: nucleoprotein; PDBTitle: exonuclease domain of lassa virus nucleoprotein bound |

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|----|-------------------------|---|-----------|--------------|------|--|
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| 56 | c1cmwA |  | Alignment | not modelled | 64.2 | 18 to manganese PDB header: transferase Chain: A: PDB Molecule: protein (dna polymerase i); PDBTitle: crystal structure of taq dna-polymerase shows a new orientation for the structure-specific nuclease domain |
| 57 | c3sahA |  | Alignment | not modelled | 49.5 | 21 PDB header: hydrolase Chain: A: PDB Molecule: exosome component 10; PDBTitle: crystal structure of the human rrp6 catalytic domain with y436a2 mutation in the catalytic site |
| 58 | d2py5a1 |  | Alignment | not modelled | 17.8 | 19 Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: DnaQ-like 3'-5' exonuclease |
| 59 | c1lj2B |  | Alignment | not modelled | 9.4 | 13 PDB header: viral protein/ translation Chain: B: PDB Molecule: nonstructural rna-binding protein 34; PDBTitle: recognition of eif4g by rotavirus nsp3 reveals a basis for2 mrna circularization |
| 60 | c3eukC |  | Alignment | not modelled | 5.4 | 14 PDB header: cell cycle Chain: C: PDB Molecule: chromosome partition protein mukb, linker; PDBTitle: crystal structure of muke-mukf(residues 292-443)-mukb(head2 domain)-atpgamma complex, asymmetric dimer |
| 61 | c3g6iA |  | Alignment | not modelled | 5.3 | 18 PDB header: unknown function Chain: A: PDB Molecule: putative outer membrane protein, part of carbohydrate PDBTitle: crystal structure of an outer membrane protein, part of a putative2 carbohydrate binding complex (bt_1022) from bacteroides3 thetaiotaomicron vpi-5482 at 1.93 a resolution |