

Phyre2

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| Email | mdejesus@rockefeller.edu |
| Description | RVBD1838c (-) _2087264_2087659 |
| Date | Fri Aug 2 13:30:45 BST 2019 |
| Unique Job ID | 93cd86ec17bf04a9 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|--|
| 1 | c5wzfB_ |  Alignment |  | 99.9 | 27 | PDB header: hydrolase Chain: B: PDB Molecule: 23s rrna-specific endonuclease vapc20; PDBTitle: crystal structure of mycobacterium tuberculosis vapc20 (rv2549c),2 sarcin-ricin loop cleaving toxin |
| 2 | c3zvkc_ |  Alignment |  | 99.8 | 15 | PDB header: antitoxin/toxin/dna Chain: C: PDB Molecule: toxin of toxin-antitoxin system; PDBTitle: crystal structure of vapbc2 from rickettsia felis bound to2 a dna fragment from their promoter |
| 3 | c5l6mC_ |  Alignment |  | 99.8 | 15 | PDB header: hydrolase Chain: C: PDB Molecule: ribonuclease vapc; PDBTitle: structure of caulobacter crescentus vapbc1 (vapb1deltac:vapc1 form) |
| 4 | c5x3tD_ |  Alignment |  | 99.8 | 17 | PDB header: antitoxin/toxin Chain: D: PDB Molecule: ribonuclease vapc26; PDBTitle: vapbc from mycobacterium tuberculosis |
| 5 | c6nkIA_ |  Alignment |  | 99.8 | 15 | PDB header: antitoxin Chain: A: PDB Molecule: ribonuclease vapc; PDBTitle: 2.2 a resolution structure of vapbc-1 from nontypeable haemophilus2 influenzae |
| 6 | c3tndC_ |  Alignment |  | 99.7 | 12 | PDB header: translation, toxin Chain: C: PDB Molecule: trna(fmet)-specific endonuclease vapc; PDBTitle: crystal structure of shigella flexneri vapbc toxin-antitoxin complex |
| 7 | c4xqrG_ |  Alignment |  | 99.7 | 11 | PDB header: toxin/antitoxin Chain: G: PDB Molecule: ribonuclease vapc30; PDBTitle: crystal structure of addiction module from mycobacterial species |
| 8 | c6a7vG_ |  Alignment |  | 99.7 | 15 | PDB header: toxin/antitoxin Chain: G: PDB Molecule: ribonuclease vapc11; PDBTitle: crystal structure of mycobacterium tuberculosis vapbc11 toxin-2 antitoxin complex |
| 9 | d2h1ca1 |  Alignment |  | 99.7 | 15 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 10 | c4chgC_ |  Alignment |  | 99.7 | 13 | PDB header: toxin/antitoxin Chain: C: PDB Molecule: probable ribonuclease vapc15; PDBTitle: crystal structure of vapbc15 complex from mycobacterium tuberculosis |
| 11 | c3h87B_ |  Alignment |  | 99.6 | 15 | PDB header: toxin/antitoxin Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: rv0301 rv0300 toxin antitoxin complex from mycobacterium tuberculosis |

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|----|-------------------------|-----------|---|------|----|--|
| 12 | d1w8ia_ | Alignment |  | 99.6 | 22 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 13 | d2fe1a1 | Alignment |  | 99.6 | 17 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 14 | c2fe1A_ | Alignment |  | 99.6 | 17 | PDB header: structural genomics, unknown function Chain: A; PDB Molecule: conserved hypothetical protein pae0151; PDBTitle: crystal structure of pae0151 from pyrobaculum aerophilum |
| 15 | c3dboB_ | Alignment |  | 99.6 | 16 | PDB header: toxin/antitoxin Chain: B; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a member of the vapbc family of toxin-antitoxin2 systems, vapbc-5, from mycobacterium tuberculosis |
| 16 | c5sv2A_ | Alignment |  | 99.5 | 15 | PDB header: hydrolase Chain: A; PDB Molecule: ribonuclease vapc21; PDBTitle: toxin vapc21 from mycobacterium tuberculosis |
| 17 | d1v96a1 | Alignment |  | 99.5 | 10 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 18 | d1y82a1 | Alignment |  | 99.2 | 9 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 19 | d1v8pa_ | Alignment |  | 98.4 | 15 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 20 | c1v8pK_ | Alignment |  | 98.4 | 15 | PDB header: structural genomics, unknown function Chain: K; PDB Molecule: hypothetical protein pae2754; PDBTitle: crystal structure of pae2754 from pyrobaculum aerophilum |
| 21 | c3i8oA_ | Alignment | not modelled | 98.3 | 11 | PDB header: rna binding protein Chain: A; PDB Molecule: kh domain-containing protein mj1533; PDBTitle: a domain of a functionally unknown protein from methanocaldococcus2 jannaschii dsm 2661. |
| 22 | d1o4wa_ | Alignment | not modelled | 98.0 | 18 | Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain |
| 23 | c3ix7A_ | Alignment | not modelled | 97.9 | 12 | PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein ttha0540; PDBTitle: crystal structure of a domain of functionally unknown protein from2 thermus thermophilus hb8 |
| 24 | c2hwwC_ | Alignment | not modelled | 97.2 | 16 | PDB header: rna binding protein Chain: C; PDB Molecule: telomerase-binding protein est1a; PDBTitle: structure of pin domain of human smg6 |
| 25 | c5ywwA_ | Alignment | not modelled | 97.1 | 11 | PDB header: hydrolase Chain: A; PDB Molecule: nucleotide binding protein pinc; PDBTitle: archael ruvb-like holiday junction helicase |
| 26 | c5yz4A_ | Alignment | not modelled | 97.0 | 14 | PDB header: hydrolase Chain: A; PDB Molecule: rrna-processing protein fcf1; PDBTitle: structure of the pin domain endonuclease utp24 |
| 27 | c2lcqA_ | Alignment | not modelled | 97.0 | 16 | PDB header: metal binding protein Chain: A; PDB Molecule: putative toxin vapc6; PDBTitle: solution structure of the endonuclease nob1 from p.horikoshii |
| 28 | c5jppd_ | Alignment | not modelled | 96.9 | 20 | PDB header: ribosome Chain: D; PDB Molecule: wd40 domain proteins; PDBTitle: cryo-em structure of the 90s pre-ribosome |
| | | | | | | PDB header: hydrolase |

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| 29 | c5f4hF_ | Alignment | not modelled | 96.8 | 11 | Chain: F; PDB Molecule: nucleotide binding protein pinc; PDBTitle: archaeal ruvb-like holiday junction helicase |
| 30 | c4mj7B_ | Alignment | not modelled | 95.8 | 13 | PDB header: rna binding protein Chain: B; PDB Molecule: rrna-processing protein utp23; PDBTitle: crystal structure of the pin domain of saccharomyces cerevisiae utp23 |
| 31 | c3v32B_ | Alignment | not modelled | 88.0 | 14 | PDB header: hydrolase Chain: B; PDB Molecule: ribonuclease zc3h12a; PDBTitle: crystal structure of mcip1 n-terminal conserved domain |
| 32 | c2hwyB_ | Alignment | not modelled | 80.8 | 13 | PDB header: rna binding protein Chain: B; PDB Molecule: protein smg5; PDBTitle: structure of pin domain of human smg5. |
| 33 | c6g5iy_ | Alignment | not modelled | 79.9 | 23 | PDB header: ribosome Chain: Y; PDB Molecule: 40s ribosomal protein s24; PDBTitle: cryo-em structure of a late human pre-40s ribosomal subunit - state r |
| 34 | c3v33A_ | Alignment | not modelled | 72.3 | 17 | PDB header: hydrolase Chain: A; PDB Molecule: ribonuclease zc3h12a; PDBTitle: crystal structure of mcip1 conserved domain with zinc-finger motif |
| 35 | c3zddA_ | Alignment | not modelled | 55.3 | 17 | PDB header: hydrolase/dna Chain: A; PDB Molecule: protein xni; PDBTitle: structure of e. coli exoix in complex with the palindromic 5ov62 oligonucleotide and potassium |
| 36 | d1tfra2 | Alignment | not modelled | 54.3 | 15 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 37 | d1cmwa2 | Alignment | not modelled | 52.3 | 11 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 38 | c3q8IA_ | Alignment | not modelled | 43.8 | 13 | PDB header: hydrolase/dna Chain: A; PDB Molecule: flap endonuclease 1; PDBTitle: crystal structure of human flap endonuclease fen1 (wt) in complex with2 substrate 5'-flap dna, sm3+, and k+ |
| 39 | d1a77a2 | Alignment | not modelled | 40.3 | 22 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 40 | d1ul1x2 | Alignment | not modelled | 39.0 | 13 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 41 | d1xo1a2 | Alignment | not modelled | 38.5 | 19 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 42 | c1ut8B_ | Alignment | not modelled | 33.8 | 21 | PDB header: hydrolase Chain: B; PDB Molecule: exodeoxyribonuclease; PDBTitle: divalent metal ions (zinc) bound to t5 5'-exonuclease |
| 43 | c1jqsB_ | Alignment | not modelled | 27.8 | 15 | PDB header: ribosome Chain: B; PDB Molecule: elongation factor g; PDBTitle: fitting of I11 protein and elongation factor g (domain g'2 and v) in the cryo-em map of e. coli 70s ribosome bound3 with ef-g and gmppcp, a nonhydrolysable gtp analog |
| 44 | d1mc8a2 | Alignment | not modelled | 27.4 | 17 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 45 | c1rxvA_ | Alignment | not modelled | 25.0 | 21 | PDB header: hydrolase/dna Chain: A; PDB Molecule: flap structure-specific endonuclease; PDBTitle: crystal structure of a. fulgidus fen-1 bound to dna |
| 46 | c1b43A_ | Alignment | not modelled | 24.5 | 17 | PDB header: transferase Chain: A; PDB Molecule: protein (fen-1); PDBTitle: fen-1 from p. furiosus |
| 47 | c2ihnA_ | Alignment | not modelled | 23.7 | 12 | PDB header: hydrolase/dna Chain: A; PDB Molecule: ribonuclease h; PDBTitle: co-crystal of bacteriophage t4 rnase h with a fork dna2 substrate |
| 48 | d1rxwa2 | Alignment | not modelled | 22.0 | 25 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 49 | c2izoA_ | Alignment | not modelled | 20.1 | 9 | PDB header: hydrolase Chain: A; PDB Molecule: flap structure-specific endonuclease; PDBTitle: structure of an archaeal pcna1-pcna2-fen1 complex |
| 50 | c4wa8A_ | Alignment | not modelled | 17.0 | 17 | PDB header: hydrolase Chain: A; PDB Molecule: flap endonuclease 1; PDBTitle: methanopyrus kandleri fen-1 nuclease |
| 51 | c3qeaZ_ | Alignment | not modelled | 16.2 | 13 | PDB header: hydrolase/dna Chain: Z; PDB Molecule: exonuclease 1; PDBTitle: crystal structure of human exonuclease 1 exo1 (wt) in complex with dna2 (complex ii) |
| 52 | c3oryA_ | Alignment | not modelled | 14.3 | 17 | PDB header: hydrolase Chain: A; PDB Molecule: flap endonuclease 1; PDBTitle: crystal structure of flap endonuclease 1 from hyperthermophilic2 archaeon desulfurococcus amyolyticus |
| 53 | d1u9ya1 | Alignment | not modelled | 13.2 | 7 | Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosylpyrophosphate synthetase-like |
| 54 | d1b43a2 | Alignment | not modelled | 10.6 | 17 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 55 | c1a77A_ | Alignment | not modelled | 10.3 | 15 | PDB header: 5'-3' exo/endo nuclease Chain: A; PDB Molecule: flap endonuclease-1 protein; PDBTitle: flap endonuclease-1 from methanococcus jannaschii |

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| 56 | c4q0rB_ | Alignment | not modelled | 9.2 | 9 | PDB header: hydrolase/dna Chain: B: PDB Molecule: dna repair protein rad2; PDBTitle: the catalytic core of rad2 (complex i) |
| 57 | c4g25A_ | Alignment | not modelled | 9.2 | 18 | PDB header: rna binding protein Chain: A: PDB Molecule: pentatricopeptide repeat-containing protein at2g32230, PDBTitle: crystal structure of proteinaceous rna p 1 (prorp1) from a.2 thaliana, semet substituted form with sr |
| 58 | c3esgA_ | Alignment | not modelled | 9.1 | 31 | PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of hutd from pseudomonas fluorescens sbw25 |
| 59 | d1ylla1 | Alignment | not modelled | 8.8 | 25 | Fold: Double-stranded beta-helix Superfamily: RmIC-like cupins Family: PA5104-like |
| 60 | c1cmwA_ | Alignment | not modelled | 8.0 | 11 | PDB header: transferase Chain: A: PDB Molecule: protein (dna polymerase i); PDBTitle: crystal structure of taq dna-polymerase shows a new orientation for2 the structure-specific nuclease domain |
| 61 | c5t9jB_ | Alignment | not modelled | 7.5 | 13 | PDB header: hydrolase Chain: B: PDB Molecule: flap endonuclease gen homolog 1; PDBTitle: crystal structure of human gen1 in complex with holliday junction dna2 in the upper interface |
| 62 | c6c34A_ | Alignment | not modelled | 6.0 | 14 | PDB header: dna binding protein Chain: A: PDB Molecule: 5'-3' exonuclease; PDBTitle: mycobacterium smegmatis dna flap endonuclease mutant d125n |
| 63 | c4ixoB_ | Alignment | not modelled | 5.9 | 17 | PDB header: protein binding Chain: B: PDB Molecule: nifs-like protein; PDBTitle: x-ray structure of nifs-like protein from rickettsia africae esf-5 |