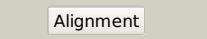
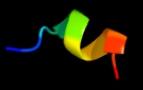
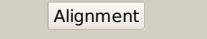
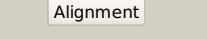
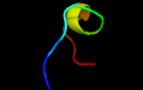
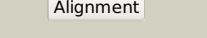
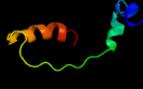
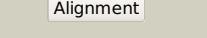
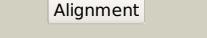
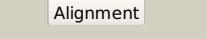
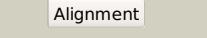
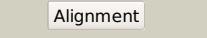
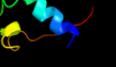
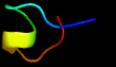
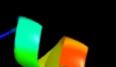


Phyre²

| | |
|---------------|------------------------------|
| Email | mdejesus@rockefeller.edu |
| Description | RVBD2336_(-)_2610847_2611815 |
| Date | Mon Aug 5 13:25:48 BST 2019 |
| Unique Job ID | 8eff3933f5cca657 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|---|
| 1 | c2f5zK_ |  Alignment |  | 41.6 | 73 | PDB header: oxidoreductase/protein binding Chain: K: PDB Molecule: pyruvate dehydrogenase protein x component; PDBTitle: crystal structure of human dihydrolipoamide dehydrogenase2 (e3) complexed to the e3-binding domain of human e3-binding protein |
| 2 | c1zy8M_ |  Alignment |  | 40.6 | 73 | PDB header: oxidoreductase Chain: M: PDB Molecule: pyruvate dehydrogenase protein x component, PDBTitle: the crystal structure of dihydrolipoamide dehydrogenase and 2 dihydrolipoamide dehydrogenase-binding protein (didomain)3 subcomplex of human pyruvate dehydrogenase complex. |
| 3 | c2f60K_ |  Alignment |  | 31.3 | 64 | PDB header: protein binding Chain: K: PDB Molecule: pyruvate dehydrogenase protein x component; PDBTitle: crystal structure of the dihydrolipoamide dehydrogenase (e3)-binding2 domain of human e3-binding protein |
| 4 | c5h0jA_ |  Alignment |  | 25.6 | 47 | PDB header: lyase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of wt pedobacter heparinus smug2 |
| 5 | c3kwvF_ |  Alignment |  | 23.4 | 38 | PDB header: toxin/protein transport Chain: F: PDB Molecule: lethal factor; PDBTitle: structural basis for the unfolding of anthrax lethal factor b2 protective antigen oligomers |
| 6 | c3ah5E_ |  Alignment |  | 21.6 | 17 | PDB header: transferase Chain: E: PDB Molecule: thymidylate synthase thyx; PDBTitle: crystal structure of flavin dependent thymidylate synthase thyx from2 helicobacter pylori complexed with fad and dump |
| 7 | d1j7na1 |  Alignment |  | 21.4 | 38 | Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Anthrax toxin lethal factor, N- and C-terminal domains |
| 8 | c4puga_ |  Alignment |  | 19.6 | 20 | PDB header: dna binding protein Chain: A: PDB Molecule: bola like protein; PDBTitle: bola1 from arabidopsis thaliana |
| 9 | c5x42B_ |  Alignment |  | 17.7 | 54 | PDB header: protein transport Chain: B: PDB Molecule: icmo (dotl); PDBTitle: structure of dotl(590-659)-dotn derived from legionella pneumophila |
| 10 | d1oe4a_ |  Alignment |  | 16.2 | 31 | Fold: Uracil-DNA glycosylase-like Superfamily: Uracil-DNA glycosylase-like Family: Single-strand selective monofunctional uracil-DNA glycosylase SMUG1 |
| 11 | c3o2eA_ |  Alignment |  | 16.0 | 29 | PDB header: unknown function Chain: A: PDB Molecule: bola-like protein; PDBTitle: crystal structure of a bola-like protein from babesia bovis |

| | | | | | | |
|----|-------------------------|-----------|---|------|----|---|
| 12 | c5nfmA_ | Alignment |  | 14.7 | 24 | PDB header: ligase Chain: A: PDB Molecule: yrba; PDBTitle: crystal structure of yrba from sinorhizobium meliloti in complex with2 copper. |
| 13 | c5h93C_ | Alignment |  | 14.3 | 53 | PDB header: hydrolase Chain: C: PDB Molecule: geobacter metallireducens smug1; PDBTitle: crystal structure of geobacter metallireducens smug1 |
| 14 | c2hacA_ | Alignment |  | 14.1 | 63 | PDB header: membrane protein Chain: A: PDB Molecule: t-cell surface glycoprotein cd3 zeta chain; PDBTitle: structure of zeta-zeta transmembrane dimer |
| 15 | c2hacB_ | Alignment |  | 14.1 | 63 | PDB header: membrane protein Chain: B: PDB Molecule: t-cell surface glycoprotein cd3 zeta chain; PDBTitle: structure of zeta-zeta transmembrane dimer |
| 16 | c5w6yB_ | Alignment |  | 14.0 | 64 | PDB header: biosynthetic protein,isomerase Chain: B: PDB Molecule: chorismate mutase; PDBTitle: physcomitrella patens chorismate mutase |
| 17 | c2q2kB_ | Alignment |  | 13.9 | 48 | PDB header: dna binding protein/dna Chain: B: PDB Molecule: hypothetical protein; PDBTitle: structure of nucleic-acid binding protein |
| 18 | c2q2kA_ | Alignment |  | 12.8 | 48 | PDB header: dna binding protein/dna Chain: A: PDB Molecule: hypothetical protein; PDBTitle: structure of nucleic-acid binding protein |
| 19 | c6h3pB_ | Alignment |  | 12.1 | 55 | PDB header: plant protein Chain: B: PDB Molecule: chorismate mutase; PDBTitle: crystal structure of the cytoplasmic chorismate mutase from zea mays |
| 20 | d5csma_ | Alignment |  | 12.1 | 27 | Fold: Chorismate mutase II Superfamily: Chorismate mutase II Family: Allosteric chorismate mutase |
| 21 | c2af6G_ | Alignment | not modelled | 12.1 | 33 | PDB header: transferase Chain: G: PDB Molecule: thymidylate synthase thyx; PDBTitle: crystal structure of mycobacterium tuberculosis flavin dependent2 thymidylate synthase (mtb thyx) in the presence of co-factor fad and substrate analog 5-bromo-2'-deoxyuridine-5'-monophosphate (brdump) |
| 22 | c4ppuA_ | Alignment | not modelled | 12.0 | 55 | PDB header: isomerase Chain: A: PDB Molecule: chorismate mutase 1, chloroplastic; PDBTitle: crystal structure of atcm1 with tyrosine bound in allosteric site |
| 23 | c5w8cA_ | Alignment | not modelled | 11.4 | 18 | PDB header: biosynthetic protein Chain: A: PDB Molecule: autoinducer synthase; PDBTitle: the structure of a coa-dependent acyl-homoserine lactone synthase,2 bjai, with mta and isovaleryl-coa Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolevulinate dehydratase, ALAD (porphobilinogen synthase) |
| 24 | d1pv8a_ | Alignment | not modelled | 11.0 | 22 | PDB header: unknown function Chain: A: PDB Molecule: negoa.19184.a; PDBTitle: novel crystal structure of a hypothetical protein from neisseria2 gonorrhoeae |
| 25 | c5uebA_ | Alignment | not modelled | 10.3 | 22 | PDB header: protein binding Chain: A: PDB Molecule: protein bola; PDBTitle: solution structure of the bola protein from escherichia coli |
| 26 | c2dhnA_ | Alignment | not modelled | 9.1 | 17 | PDB header: unknown function Chain: A: PDB Molecule: bola; PDBTitle: structure of a bola protein homologue from coxiella burnetii |
| 27 | c3tr3A_ | Alignment | not modelled | 9.0 | 31 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: bola; |
| 28 | c1v60A_ | Alignment | not modelled | 8.9 | 28 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: riken cdna 1810037g04; |

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|----|-------------------------|-----------|--------------|-----|----|---|
| | | | | | | PDBTitle: solution structure of bola1 protein from mus musculus |
| 29 | c3fnnA | Alignment | not modelled | 8.7 | 27 | PDB header: transferase Chain: A: PDB Molecule: thymidylate synthase thyx; PDBTitle: biochemical and structural analysis of an atypical thyx:2 corynebacterium glutamicum nchu 87078 depends on thya for3 thymidine biosynthesis |
| 30 | c3obkH | Alignment | not modelled | 8.3 | 23 | PDB header: lyase Chain: H: PDB Molecule: delta-aminolevulinic acid dehydratase; PDBTitle: crystal structure of delta-aminolevulinic acid dehydratase2 (porphobilinogen synthase) from toxoplasma gondii me49 in complex3 with the reaction product porphobilinogen |
| 31 | d2c1ha1 | Alignment | not modelled | 7.9 | 27 | Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase) |
| 32 | c4k59A | Alignment | not modelled | 7.8 | 43 | PDB header: rna binding protein Chain: A: PDB Molecule: rna binding protein rsmf; PDBTitle: crystal structure of pseudomonas aeruginosa rsmf |
| 33 | c1xs3A | Alignment | not modelled | 7.5 | 34 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein xc975; PDBTitle: solution structure analysis of the xc975 protein |
| 34 | c1xfzA | Alignment | not modelled | 7.2 | 31 | PDB header: lyase/metal binding protein Chain: A: PDB Molecule: calmodulin-sensitive adenylate cyclase; PDBTitle: crystal structure of anthrax edema factor (ef) in complex with2 calmodulin in the presence of 1 millimolar exogenously added calcium3 chloride |
| 35 | c1xfuE | Alignment | not modelled | 7.2 | 31 | PDB header: lyase/metal binding protein Chain: E: PDB Molecule: calmodulin-sensitive adenylate cyclase; PDBTitle: crystal structure of anthrax edema factor (ef) truncation mutant, ef-2 delta 64 in complex with calmodulin |
| 36 | d1h7na | Alignment | not modelled | 7.2 | 27 | Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase) |
| 37 | c4puIA | Alignment | not modelled | 6.7 | 34 | PDB header: protein binding Chain: A: PDB Molecule: sufe-like protein, chloroplastic; PDBTitle: bola domain of sufe1 from arabidopsis thaliana |
| 38 | c6fpqG | Alignment | not modelled | 6.4 | 29 | PDB header: cell invasion Chain: G: PDB Molecule: chromosome 16, whole genome shotgun sequence; PDBTitle: structure of the ustilago maydis chorismate mutase 1 in complex with a2 zea mays kiwellin |
| 39 | d2csua1 | Alignment | not modelled | 6.3 | 17 | Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain |
| 40 | c2mm9A | Alignment | not modelled | 6.2 | 43 | PDB header: transcription Chain: A: PDB Molecule: bola2; PDBTitle: solution structure of reduced bola2 from arabidopsis thaliana |
| 41 | c2nclA | Alignment | not modelled | 5.7 | 14 | PDB header: protein binding Chain: A: PDB Molecule: bola-like protein 3; PDBTitle: solution structure of bola3 from homo sapiens |
| 42 | d1gzga | Alignment | not modelled | 5.7 | 28 | Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase) |
| 43 | c3gmvX | Alignment | not modelled | 5.6 | 40 | PDB header: protein binding Chain: X: PDB Molecule: beta-lactamase inhibitory protein blip-i; PDBTitle: crystal structure of beta-lactamse inhibitory protein-i (blip-i) in2 apo form |
| 44 | d1coka | Alignment | not modelled | 5.6 | 11 | Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain |
| 45 | c3gmxB | Alignment | not modelled | 5.5 | 53 | PDB header: protein binding Chain: B: PDB Molecule: blip; PDBTitle: crystal structure of beta-lactamse inhibitory protein-like protein2 (blip) at 1.05 angstrom resolution |
| 46 | c1pwqA | Alignment | not modelled | 5.4 | 38 | PDB header: hydrolase Chain: A: PDB Molecule: lethal factor; PDBTitle: crystal structure of anthrax lethal factor complexed with2 thioacetyl-tyr-pro-met-amide, a metal-chelating peptidyl3 small molecule inhibitor |
| 47 | d2py5a2 | Alignment | not modelled | 5.3 | 41 | Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: DNA polymerase I |
| 48 | d1l6sa | Alignment | not modelled | 5.2 | 25 | Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase) |
| 49 | c5lzlH | Alignment | not modelled | 5.1 | 32 | PDB header: lyase Chain: H: PDB Molecule: delta-aminolevulinic acid dehydratase; PDBTitle: pyrobaculum calidifontis 5-aminolaevulinic acid dehydratase |
| 50 | c3pmkR | Alignment | not modelled | 5.1 | 53 | PDB header: viral protein Chain: R: PDB Molecule: phosphoprotein; PDBTitle: crystal structure of the vesicular stomatitis virus rna free2 nucleoprotein/phosphoprotein complex |
| 51 | c3pmkP | Alignment | not modelled | 5.1 | 53 | PDB header: viral protein Chain: P: PDB Molecule: phosphoprotein; PDBTitle: crystal structure of the vesicular stomatitis virus rna free2 nucleoprotein/phosphoprotein complex |
| 52 | c5dcaA | Alignment | not modelled | 5.0 | 23 | PDB header: hydrolase Chain: A: PDB Molecule: pre-mrna-splicing helicase brr2; PDBTitle: crystal structure of yeast full length brr2 in complex with prp8 jab12 domain |
| 53 | c50ooA | Alignment | not modelled | 5.0 | 34 | PDB header: viral protein Chain: A: PDB Molecule: non-structural protein ns-s; PDBTitle: structure of the rift valley fever virus nss protein core |

| | | | | domain |
|----|-------------------------|---------------------------|--------------|---|
| 54 | c3pmkN_ | Alignment | not modelled | 5.0 53 PDB header: viral protein Chain: N: PDB Molecule: phosphoprotein; PDBTitle: crystal structure of the vesicular stomatitis virus rna free2 nucleoprotein/phosphoprotein complex |