


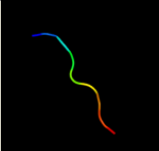





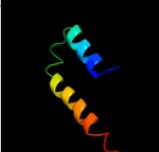

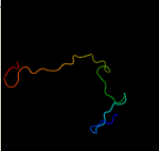

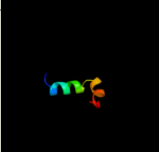



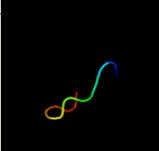

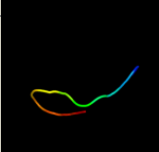

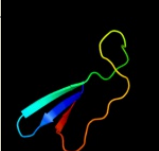


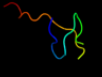








Phyre2

| | |
|---------------|-----------------------------|
| Email | l.a.kelley@imperial.ac.uk |
| Description | Q47319 |
| Date | Thu Jan 5 12:36:46 GMT 2012 |
| Unique Job ID | 50aacaf3b68994f6 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|--|---|------------|--------|--|
| 1 | c1rk8C_ |  Alignment |  | 53.4 | 67 | PDB header: translation Chain: C: PDB Molecule: within the bgcn gene intron protein; PDBTitle: structure of the cytosolic protein pym bound to the mago-2 y14 core of the exon junction complex |
| 2 | d1rk8C_ |  Alignment |  | 53.4 | 67 | Fold: WW domain-like Superfamily: Pym (Within the bgcn gene intron protein, WIBG), N-terminal domain Family: Pym (Within the bgcn gene intron protein, WIBG), N-terminal domain |
| 3 | d1xrxa1 |  Alignment |  | 40.6 | 23 | Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: SeqA N-terminal domain-like |
| 4 | c1rxrD_ |  Alignment |  | 40.6 | 23 | PDB header: replication inhibitor Chain: D: PDB Molecule: sega protein; PDBTitle: crystal structure of a dna-binding protein |
| 5 | c3mopC_ |  Alignment |  | 32.1 | 20 | PDB header: signaling protein, immune system Chain: C: PDB Molecule: myeloid differentiation primary response protein myd88; PDBTitle: the ternary death domain complex of myd88, irak4, and irak2 |
| 6 | c3c6fD_ |  Alignment |  | 30.7 | 7 | PDB header: structural genomics, unknown function Chain: D: PDB Molecule: yetf protein; PDBTitle: crystal structure of protein bsu07140 from bacillus subtilis |
| 7 | d2dofa1 |  Alignment |  | 22.5 | 22 | Fold: Another 3-helical bundle Superfamily: FF domain Family: FF domain |
| 8 | c3bvoA_ |  Alignment |  | 22.3 | 29 | PDB header: chaperone Chain: A: PDB Molecule: co-chaperone protein hscb, mitochondrial precursor; PDBTitle: crystal structure of human co-chaperone protein hscb |
| 9 | d1ffya1 |  Alignment |  | 22.2 | 27 | Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases |
| 10 | d2dara2 |  Alignment |  | 20.0 | 31 | Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain |
| 11 | d1yuda1 |  Alignment |  | 18.2 | 13 | Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: YML079-like |

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|----|-------------------------|-----------|---|------|----|--|
| 12 | c3lzzB_ | Alignment |  | 15.5 | 6 | PDB header: unknown function Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structures of cupin superfamily bbd9f85 from branchiostoma2 belcheri tsingtauense in apo and gdp-bound forms |
| 13 | dlesza_ | Alignment |  | 15.2 | 13 | Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Periplasmic ferric siderophore binding protein FhuD |
| 14 | d2apob1 | Alignment |  | 14.8 | 28 | Fold: Rubredoxin-like Superfamily: Nop10-like SnoRNP Family: Nucleolar RNA-binding protein Nop10-like |
| 15 | c2kiqA_ | Alignment |  | 14.8 | 14 | PDB header: transcription regulator Chain: A: PDB Molecule: transcription elongation regulator 1; PDBTitle: solution structure of the ff domain 2 of human transcription2 elongation factor ca150 |
| 16 | c2knqA_ | Alignment |  | 13.4 | 20 | PDB header: protein transport Chain: A: PDB Molecule: general secretion pathway protein h; PDBTitle: solution structure of e.coli gsph |
| 17 | d1cta1 | Alignment |  | 13.3 | 27 | Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain |
| 18 | d2vka2 | Alignment |  | 13.3 | 12 | Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain |
| 19 | d1ima1 | Alignment |  | 13.1 | 17 | Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain |
| 20 | d1liba1 | Alignment |  | 12.1 | 38 | Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain |
| 21 | c2elpA_ | Alignment | not modelled | 11.8 | 20 | PDB header: transcription Chain: A: PDB Molecule: zinc finger protein 406; PDBTitle: solution structure of the 13th c2h2 zinc finger of human2 zinc finger protein 406 |
| 22 | c2a7yA_ | Alignment | not modelled | 11.6 | 25 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein rv2302/mt2359; PDBTitle: solution structure of the conserved hypothetical protein2 rv2302 from the bacterium mycobacterium tuberculosis |
| 23 | d2a7ya1 | Alignment | not modelled | 11.6 | 25 | Fold: SH3-like barrel Superfamily: Cell growth inhibitor/plasmid maintenance toxic component Family: Rv2302-like |
| 24 | d2etva1 | Alignment | not modelled | 11.2 | 6 | Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: TM0189-like |
| 25 | d2ey4e1 | Alignment | not modelled | 10.4 | 31 | Fold: Rubredoxin-like Superfamily: Nop10-like SnoRNP Family: Nucleolar RNA-binding protein Nop10-like |
| 26 | c2yetB_ | Alignment | not modelled | 10.2 | 18 | PDB header: hydrolase Chain: B: PDB Molecule: gh61 isozyme a; PDBTitle: thermoascus gh61 isozyme a |
| 27 | c2nrrA_ | Alignment | not modelled | 10.0 | 20 | PDB header: hydrolase Chain: A: PDB Molecule: uvrabc system protein c; PDBTitle: crystal structure of the c-terminal rnaseh endonuclease2 domain of uvrbc |
| 28 | c2kfdA_ | Alignment | not modelled | 10.0 | 32 | PDB header: nuclear protein Chain: A: PDB Molecule: pre-mrna-processing protein prp40; PDBTitle: prp40 ff4 domain |
| | | | | | | Fold: Anticodon-binding domain-like |

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|----|-------------------------|-----------|--------------|-----|----|---|
| 29 | d1v95a_ | Alignment | not modelled | 9.7 | 8 | Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS |
| 30 | d2afaa1 | Alignment | not modelled | 9.5 | 7 | Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: N-acylglucosamine (NAG) epimerase |
| 31 | d1zbdb_ | Alignment | not modelled | 9.1 | 19 | Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain |
| 32 | c2iy3A_ | Alignment | not modelled | 9.0 | 11 | PDB header: rna-binding Chain: A: PDB Molecule: signal recognition particle protein ffh; PDBTitle: structure of the e. coli signal recognition particle2 bound to a translating ribosome |
| 33 | c2rr7A_ | Alignment | not modelled | 8.9 | 36 | PDB header: motor protein Chain: A: PDB Molecule: dynein heavy chain 9; PDBTitle: microtubule binding domain of dynein-c |
| 34 | d2ewoa1 | Alignment | not modelled | 8.8 | 12 | Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase |
| 35 | c3n43B_ | Alignment | not modelled | 8.6 | 58 | PDB header: viral protein Chain: B: PDB Molecule: e2 envelope glycoprotein; PDBTitle: crystal structures of the mature envelope glycoprotein complex2 (trypsin cleavage) of chikungunya virus. |
| 36 | c2hw4A_ | Alignment | not modelled | 8.5 | 21 | PDB header: structural genomics, hydrolase Chain: A: PDB Molecule: 14 kda phosphohistidine phosphatase; PDBTitle: crystal structure of human phosphohistidine phosphatase |
| 37 | d2cu8a1 | Alignment | not modelled | 8.4 | 20 | Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain |
| 38 | c2xfbl_ | Alignment | not modelled | 8.4 | 58 | PDB header: virus Chain: I: PDB Molecule: e2 envelope glycoprotein; PDBTitle: the chikungunya e1 e2 envelope glycoprotein complex fit into2 the sindbis virus cryo-em map |
| 39 | c3mhsE_ | Alignment | not modelled | 8.4 | 40 | PDB header: hydrolase/transcription regulator/protei Chain: E: PDB Molecule: saga-associated factor 73; PDBTitle: structure of the saga ubp8/sgf11/sus1/sgf73 dub module bound to2 ubiquitin aldehyde |
| 40 | d1lf6a2 | Alignment | not modelled | 8.3 | 23 | Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like |
| 41 | c2k85A_ | Alignment | not modelled | 8.2 | 16 | PDB header: protein binding Chain: A: PDB Molecule: glucocorticoid receptor dna-binding factor 1; PDBTitle: p190-a rhogap ff1 domain |
| 42 | c2iv0A_ | Alignment | not modelled | 8.2 | 9 | PDB header: oxidoreductase Chain: A: PDB Molecule: isocitrate dehydrogenase; PDBTitle: thermal stability of isocitrate dehydrogenase from2 archaeoglobus fulgidus studied by crystal structure3 analysis and engineering of chimers |
| 43 | c2hfvA_ | Alignment | not modelled | 8.0 | 16 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein rpa1041; PDBTitle: solution nmr structure of protein rpa1041 from pseudomonas2 aeruginosa. northeast structural genomics consortium3 target pat90. |
| 44 | c1qu2A_ | Alignment | not modelled | 7.8 | 27 | PDB header: ligase/rna Chain: A: PDB Molecule: isoleucyl-trna synthetase; PDBTitle: insights into editing from an ile-trna synthetase structure2 with trna(ile) and mupirocin |
| 45 | d1xo1a2 | Alignment | not modelled | 7.6 | 27 | Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain |
| 46 | d1ulva4 | Alignment | not modelled | 7.6 | 25 | Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like |
| 47 | c3errB_ | Alignment | not modelled | 7.4 | 10 | PDB header: ligase Chain: B: PDB Molecule: fusion protein of microtubule binding domain from PDBTitle: microtubule binding domain from mouse cytoplasmic dynein as2 a fusion with seryl-trna synthetase |
| 48 | d1kl7a_ | Alignment | not modelled | 7.4 | 12 | Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes |
| 49 | c3muwU_ | Alignment | not modelled | 7.1 | 42 | PDB header: virus Chain: U: PDB Molecule: structural polyprotein; PDBTitle: pseudo-atomic structure of the e2-e1 protein shell in sindbis virus |
| 50 | d2doea1 | Alignment | not modelled | 6.9 | 10 | Fold: Another 3-helical bundle Superfamily: FF domain Family: FF domain |
| 51 | c2ofqA_ | Alignment | not modelled | 6.9 | 14 | PDB header: protein transport/protein transport Chain: A: PDB Molecule: trao; PDBTitle: nmr solution structure of a complex between the virb9/virb72 interaction domains of the pkm101 type iv secretion system |
| 52 | d1ryqa_ | Alignment | not modelled | 6.9 | 15 | Fold: Rubredoxin-like Superfamily: RNA polymerase subunits Family: RpoE2-like |
| 53 | c3k7bA_ | Alignment | not modelled | 6.7 | 40 | PDB header: viral protein Chain: A: PDB Molecule: protein a33; PDBTitle: the structure of the poxvirus a33 protein reveals a dimer of unique c-2 type lectin-like domains. |
| | | | | | | PDB header: protein transport, rna binding protein Chain: A: PDB Molecule: nucleoporin nup145; |

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|----|-------------------------|-----------|--------------|-----|----|---|
| 54 | c3kepA | Alignment | not modelled | 6.7 | 15 | PDBTitle: crystal structure of the autoproteolytic domain from the2 nuclear pore complex component nup145 from saccharomyces3 cerevisiae |
| 55 | d1pn0a2 | Alignment | not modelled | 6.6 | 8 | Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like |
| 56 | c3chxG | Alignment | not modelled | 6.5 | 67 | PDB header: membrane protein Chain: G: PDB Molecule: pmoc; PDBTitle: crystal structure of methylosinus trichosporium ob3b2 particulate methane monooxygenase (pmmo) |
| 57 | c3n40P | Alignment | not modelled | 6.5 | 58 | PDB header: viral protein Chain: P: PDB Molecule: p62 envelope glycoprotein; PDBTitle: crystal structure of the immature envelope glycoprotein complex of2 chikungunya virus. |
| 58 | c2jyvA | Alignment | not modelled | 6.2 | 57 | PDB header: cytokine Chain: A: PDB Molecule: granulin-2; PDBTitle: human granulin f |
| 59 | d1omza | Alignment | not modelled | 6.1 | 11 | Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases Family: Exostosin |
| 60 | d2hfva1 | Alignment | not modelled | 6.0 | 16 | Fold: Ferredoxin-like Superfamily: GlnB-like Family: RPA1041-like |
| 61 | d1bpoa1 | Alignment | not modelled | 6.0 | 20 | Fold: alpha-alpha superhelix Superfamily: ARM repeat Family: Clathrin heavy-chain linker domain |
| 62 | c1yewC | Alignment | not modelled | 5.9 | 57 | PDB header: oxidoreductase, membrane protein Chain: C: PDB Molecule: particulate methane monooxygenase subunit c2; PDBTitle: crystal structure of particulate methane monooxygenase |
| 63 | c3g9yA | Alignment | not modelled | 5.9 | 29 | PDB header: transcription/rna Chain: A: PDB Molecule: zinc finger ran-binding domain-containing protein 2; PDBTitle: crystal structure of the second zinc finger from zranb2/znf265 bound2 to 6 nt ssrna sequence agguaa |
| 64 | d2gnra1 | Alignment | not modelled | 5.8 | 29 | Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: SSO2064-like |
| 65 | c2xzn5 | Alignment | not modelled | 5.7 | 36 | PDB header: ribosome Chain: 5: PDB Molecule: ribosomal protein s26e containing protein; PDBTitle: 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 |
| 66 | d2cqna1 | Alignment | not modelled | 5.7 | 29 | Fold: Another 3-helical bundle Superfamily: FF domain Family: FF domain |
| 67 | c2nvuB | Alignment | not modelled | 5.6 | 29 | PDB header: protein turnover, ligase Chain: B: PDB Molecule: maltose binding protein/nedd8-activating enzyme PDBTitle: structure of appbp1-uba3~nedd8-nedd8-mgatp-ubc12(c111a), a2 trapped ubiquitin-like protein activation complex |
| 68 | d1j3kc | Alignment | not modelled | 5.5 | 7 | Fold: Thymidylate synthase/dCMP hydroxymethylase Superfamily: Thymidylate synthase/dCMP hydroxymethylase Family: Thymidylate synthase/dCMP hydroxymethylase |
| 69 | d3blza1 | Alignment | not modelled | 5.3 | 20 | Fold: Cystatin-like Superfamily: NTF2-like Family: Sbal0622-like |
| 70 | c3eabD | Alignment | not modelled | 5.3 | 23 | PDB header: cell cycle Chain: D: PDB Molecule: spastin; PDBTitle: crystal structure of spastin mit in complex with escrt iii |
| 71 | c1ko6A | Alignment | not modelled | 5.3 | 18 | PDB header: transferase Chain: A: PDB Molecule: nuclear pore complex protein nup98; PDBTitle: crystal structure of c-terminal autoproteolytic domain of2 nucleoporin nup98 |
| 72 | d1aa7a | Alignment | not modelled | 5.1 | 26 | Fold: Influenza virus matrix protein M1 Superfamily: Influenza virus matrix protein M1 Family: Influenza virus matrix protein M1 |
| 73 | d1vkpa | Alignment | not modelled | 5.1 | 17 | Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase |