



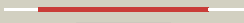






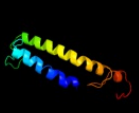









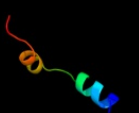

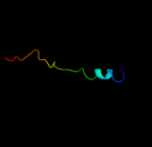


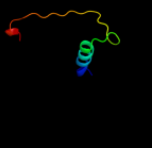



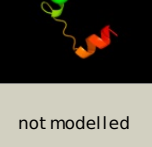


Phyre2

| | |
|---------------|-----------------------------|
| Email | l.a.kelley@imperial.ac.uk |
| Description | P02921 |
| Date | Thu Jan 5 10:57:37 GMT 2012 |
| Unique Job ID | f1ebd18e6787ca4f |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | d1pv7a_ |  Alignment |  | 100.0 | 12 | Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: LacY-like proton/sugar symporter |
| 2 | d1pw4a_ |  Alignment |  | 100.0 | 12 | Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: Glycerol-3-phosphate transporter |
| 3 | c2gfpA_ |  Alignment |  | 99.9 | 12 | PDB header: membrane protein Chain: A: PDB Molecule: multidrug resistance protein d; PDBTitle: structure of the multidrug transporter emrd from2 escherichia coli |
| 4 | c3o7pA_ |  Alignment |  | 99.9 | 12 | PDB header: transport protein Chain: A: PDB Molecule: l-fucose-proton symporter; PDBTitle: crystal structure of the e.coli fucose:proton symporter, fucp (n162a) |
| 5 | c2xutC_ |  Alignment |  | 99.8 | 12 | PDB header: transport protein Chain: C: PDB Molecule: proton/peptide symporter family protein; PDBTitle: crystal structure of a proton dependent oligopeptide (pot)2 family transporter. |
| 6 | c3qngD_ |  Alignment |  | 85.4 | 13 | PDB header: membrane protein, transport protein Chain: D: PDB Molecule: pts system, cellobiose-specific iic component; PDBTitle: crystal structure of the transporter chbc, the iic component from the2 n,n'-diacetylchitobiose-specific phosphotransferase system |
| 7 | c3hd6A_ |  Alignment |  | 49.9 | 10 | PDB header: membrane protein, transport protein Chain: A: PDB Molecule: ammonium transporter rh type c; PDBTitle: crystal structure of the human rhesus glycoprotein rhcg |
| 8 | c3b9yA_ |  Alignment |  | 39.8 | 12 | PDB header: transport protein Chain: A: PDB Molecule: ammonium transporter family rh-like protein; PDBTitle: crystal structure of the nitrosomonas europaea rh protein |
| 9 | c3d9sB_ |  Alignment |  | 19.0 | 20 | PDB header: membrane protein Chain: B: PDB Molecule: aquaporin-5; PDBTitle: human aquaporin 5 (aqp5) - high resolution x-ray structure |
| 10 | d1grja1 |  Alignment |  | 16.3 | 13 | Fold: Long alpha-hairpin Superfamily: GreA transcript cleavage protein, N-terminal domain Family: GreA transcript cleavage protein, N-terminal domain |
| 11 | c2f9jp_ |  Alignment |  | 15.6 | 24 | PDB header: rna binding protein Chain: P: PDB Molecule: splicing factor 3b subunit 1; PDBTitle: 3.0 angstrom resolution structure of a y22m mutant of the spliceosomal2 protein p14 bound to a region of sf3b155 |

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|----|-------------------------|-----------|-------------------------------------------------------------------------------------|------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | d2ia9a1 | Alignment |  | 14.4 | 21 | Fold: SpoVG-like Superfamily: SpoVG-like Family: SpoVG-like |
| 13 | c2xzmV_ | Alignment |  | 8.7 | 17 | PDB header: ribosome Chain: V: PDB Molecule: rps17e; 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 1 |
| 14 | d1u69a_ | Alignment |  | 8.2 | 27 | Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: 3-demethylubiquinone-9 3-methyltransferase |
| 15 | d2f23a1 | Alignment |  | 8.1 | 19 | Fold: Long alpha-hairpin Superfamily: GreA transcript cleavage protein, N-terminal domain Family: GreA transcript cleavage protein, N-terminal domain |
| 16 | c3e56A_ | Alignment |  | 7.3 | 21 | PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: the 2.0 angstrom resolution crystal structure of npr1517, a putative2 heterocyst differentiation inhibitor from nostoc punctiforme |
| 17 | c2yggA_ | Alignment |  | 6.7 | 21 | PDB header: metal binding protein/transport protein Chain: A: PDB Molecule: sodium/hydrogen exchanger 1; PDBTitle: complex of cambr and cam |
| 18 | c3qx3B_ | Alignment |  | 6.3 | 20 | PDB header: isomerase/dna/isomerase inhibitor Chain: B: PDB Molecule: dna topoisomerase 2-beta; PDBTitle: human topoisomerase iibeta in complex with dna and etoposide |
| 19 | c1q0wA_ | Alignment |  | 6.1 | 23 | PDB header: transport protein Chain: A: PDB Molecule: vacuolar protein sorting-associated protein PDBTitle: solution structure of vps27 amino-terminal uim-ubiquitin2 complex |
| 20 | d1ymga1 | Alignment |  | 6.0 | 11 | Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like |
| 21 | c1ymga_ | Alignment | not modelled | 6.0 | 11 | PDB header: membrane protein Chain: A: PDB Molecule: lens fiber major intrinsic protein; PDBTitle: the channel architecture of aquaporin o at 2.2 angstrom resolution |
| 22 | c3bpqC_ | Alignment | not modelled | 5.9 | 13 | PDB header: toxin Chain: C: PDB Molecule: antitoxin relb3; PDBTitle: crystal structure of relb-rele antitoxin-toxin complex from2 methanococcus jannaschii |
| 23 | c1xaoA_ | Alignment | not modelled | 5.9 | 18 | PDB header: chaperone Chain: A: PDB Molecule: mitochondrial protein import protein mas5; PDBTitle: hsp40-ydj1 dimerization domain |
| 24 | c1qysA_ | Alignment | not modelled | 5.9 | 16 | PDB header: de novo protein Chain: A: PDB Molecule: top7; PDBTitle: crystal structure of top7: a computationally designed2 protein with a novel fold |
| 25 | c1v9xA_ | Alignment | not modelled | 5.8 | 8 | PDB header: transferase Chain: A: PDB Molecule: poly (adp-ribose) polymerase; PDBTitle: solution structure of the first zn-finger domain of2 poly(adp-ribose) polymerase-1 |
| 26 | c1ji6A_ | Alignment | not modelled | 5.8 | 8 | PDB header: toxin Chain: A: PDB Molecule: pesticidal crystal protein cry3bb; PDBTitle: crystal structure of the insecticidal bacterial del2 endotoxin cry3bb1 bacillus thuringiensis |
| 27 | c1zi7C_ | Alignment | not modelled | 5.7 | 14 | PDB header: lipid binding protein Chain: C: PDB Molecule: kes1 protein; PDBTitle: structure of truncated yeast oxysterol binding protein osh4 |
| 28 | c1zvua_ | Alignment | not modelled | 5.6 | 13 | PDB header: isomerase Chain: A: PDB Molecule: topoisomerase iv subunit a; PDBTitle: structure of the full-length e. coli parc subunit |
| | | | | | | PDB header: transferase |

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|----|-------------------------|-----------|--------------|-----|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29 | c1zxaB_ | Alignment | not modelled | 5.5 | 10 | Chain: B: PDB Molecule: cgmp-dependent protein kinase 1, alpha isozyme; PDBTitle: solution structure of the coiled-coil domain of cgmp-2 dependent protein kinase ia |
| 30 | c3i05B_ | Alignment | not modelled | 5.5 | 20 | PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase from trypanosoma brucei |
| 31 | c1bjtA_ | Alignment | not modelled | 5.5 | 13 | PDB header: topoisomerase Chain: A: PDB Molecule: topoisomerase ii; PDBTitle: topoisomerase ii residues 409-1201 |
| 32 | d1bjta_ | Alignment | not modelled | 5.5 | 13 | Fold: Type II DNA topoisomerase Superfamily: Type II DNA topoisomerase Family: Type II DNA topoisomerase |
| 33 | d1zhxa1 | Alignment | not modelled | 5.4 | 14 | Fold: Oxysterol-binding protein-like Superfamily: Oxysterol-binding protein-like Family: Oxysterol-binding protein |
| 34 | c3kk1B_ | Alignment | not modelled | 5.4 | 6 | PDB header: transferase/dna Chain: B: PDB Molecule: reverse transcriptase p51 subunit; PDBTitle: hiv-1 reverse transcriptase-dna complex with nucotide inhibitor gs-2 9148-diphosphate bound in nucleotide site |
| 35 | d1uw0a_ | Alignment | not modelled | 5.3 | 15 | Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: PARP-type zinc finger |
| 36 | c2qjkM_ | Alignment | not modelled | 5.3 | 13 | PDB header: electron transport Chain: M: PDB Molecule: cytochrome b; PDBTitle: crystal structure analysis of mutant rhodobacter2 sphaeroides bc1 with stigmatellin and antimycin |
| 37 | c2wl2B_ | Alignment | not modelled | 5.3 | 17 | PDB header: isomerase Chain: B: PDB Molecule: dna gyrase subunit a; PDBTitle: crystal structure of n-terminal domain of gyra with the2 antibiotic simocyclinone d8 |
| 38 | d2zd1b1 | Alignment | not modelled | 5.2 | 6 | Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Reverse transcriptase |
| 39 | d2cqea1 | Alignment | not modelled | 5.1 | 14 | Fold: CCCH zinc finger Superfamily: CCCH zinc finger Family: CCCH zinc finger |
| 40 | c1rthA_ | Alignment | not modelled | 5.1 | 6 | PDB header: nucleotidyltransferase Chain: A: PDB Molecule: hiv-1 reverse transcriptase; PDBTitle: high resolution structures of hiv-1 rt from four rt-2 inhibitor complexes |
| 41 | d1hara_ | Alignment | not modelled | 5.0 | 6 | Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Reverse transcriptase |