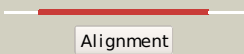

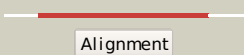

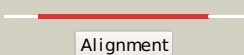

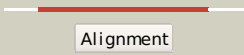

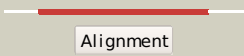
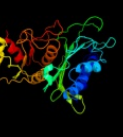
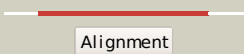

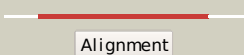

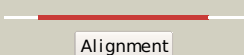

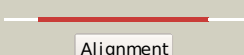

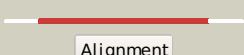

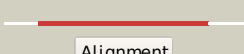



Phyre2

| | |
|---------------|-----------------------------|
| Email | I.a.kelley@imperial.ac.uk |
| Description | P0A993 |
| Date | Thu Jan 5 11:09:40 GMT 2012 |
| Unique Job ID | 1ab4cf22e9b8d7fc |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|---|
| 1 | d1nuwa_ |  Alignment |  | 100.0 | 42 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 2 | c2gq1A_ |  Alignment |  | 100.0 | 97 | PDB header: hydrolase Chain: A: PDB Molecule: fructose-1,6-bisphosphatase; PDBTitle: crystal structure of recombinant type i fructose-1,6-bisphosphatase2 from escherichia coli complexed with sulfate ions |
| 3 | c2fhyL_ |  Alignment |  | 100.0 | 44 | PDB header: hydrolase Chain: L: PDB Molecule: fructose-1,6-bisphosphatase 1; PDBTitle: structure of human liver fpbase complexed with a novel2 benzoxazole as allosteric inhibitor |
| 4 | d1ftaa_ |  Alignment |  | 100.0 | 44 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 5 | d1spia_ |  Alignment |  | 100.0 | 47 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 6 | d1bk4a_ |  Alignment |  | 100.0 | 45 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 7 | d1d9qa_ |  Alignment |  | 100.0 | 46 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 8 | c3uksB_ |  Alignment |  | 100.0 | 28 | PDB header: hydrolase Chain: B: PDB Molecule: sedoheptulose-1,7 bisphosphatase, putative; PDBTitle: 1.85 angstrom crystal structure of putative sedoheptulose-1,72 bisphosphatase from toxoplasma gondii |
| 9 | d1lbva_ |  Alignment |  | 99.9 | 21 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 10 | d1g0ha_ |  Alignment |  | 99.9 | 17 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 11 | d2hhma_ |  Alignment |  | 99.8 | 16 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |

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|----|-------------------------|-----------|--------------|------|----|--|
| 12 | c2qflA_ | Alignment | | 99.8 | 18 | PDB header: hydrolase Chain: A: PDB Molecule: inositol-1-monophosphatase; PDBTitle: structure of subh: inositol monophosphatase and extragenic2 suppressor from e. coli |
| 13 | c2p3nB_ | Alignment | | 99.8 | 16 | PDB header: hydrolase Chain: B: PDB Molecule: inositol-1-monophosphatase; PDBTitle: thermotoga maritima impase tm1415 |
| 14 | c3luzA_ | Alignment | | 99.8 | 18 | PDB header: hydrolase Chain: A: PDB Molecule: extragenic suppressor protein subh; PDBTitle: crystal structure of extragenic suppressor protein subh from2 bartonella henselae, via combined iodide sad molecular replacement |
| 15 | d1vdwa_ | Alignment | | 99.8 | 19 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 16 | c2q74B_ | Alignment | | 99.8 | 19 | PDB header: hydrolase Chain: B: PDB Molecule: inositol-1-monophosphatase; PDBTitle: mycobacterium tuberculosis subh |
| 17 | c2czhB_ | Alignment | | 99.8 | 19 | PDB header: hydrolase Chain: B: PDB Molecule: inositol monophosphatase 2; PDBTitle: crystal structure of human myo-inositol monophosphatase 22 (impa2) with phosphate ion (orthorhombic form) |
| 18 | c2fvzB_ | Alignment | | 99.8 | 20 | PDB header: hydrolase Chain: B: PDB Molecule: inositol monophosphatase 2; PDBTitle: human inositol monophosphatase 2 |
| 19 | d1xi6a_ | Alignment | | 99.8 | 19 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 20 | c2pcrA_ | Alignment | | 99.7 | 15 | PDB header: hydrolase Chain: A: PDB Molecule: inositol-1-monophosphatase; PDBTitle: crystal structure of myo-inositol-1(or 4)-monophosphatase (aq_1983)2 from aquifex aeolicus vf5 |
| 21 | d1jp4a_ | Alignment | not modelled | 99.7 | 18 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 22 | d1ka1a_ | Alignment | not modelled | 99.7 | 15 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 23 | c3b8bA_ | Alignment | not modelled | 99.7 | 19 | PDB header: hydrolase Chain: A: PDB Molecule: cysq, sulfite synthesis pathway protein; PDBTitle: crystal structure of cysq from bacteroides thetaiotaomicron, a2 bacterial member of the inositol monophosphatase family |
| 24 | d1lnpa_ | Alignment | not modelled | 99.3 | 14 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like |
| 25 | d1o12a1 | Alignment | not modelled | 66.2 | 28 | Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: N-acetylglucosamine-6-phosphate deacetylase, NagA |
| 26 | d1ni9a_ | Alignment | not modelled | 53.9 | 19 | Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Glpx-like bacterial fructose-1,6-bisphosphatase |
| 27 | c2icuB_ | Alignment | not modelled | 35.5 | 15 | PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein yedk; PDBTitle: crystal structure of hypothetical protein yedk from escherichia coli |
| 28 | d1hi9a_ | Alignment | not modelled | 33.8 | 20 | Fold: Dipeptide transport protein Superfamily: Dipeptide transport protein Family: Dipeptide transport protein |
| | | | | | | Fold: YrdC/RibB |

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|----|-------------------------|-----------|--------------|------|----|---|
| 29 | d1k7ja_ | Alignment | not modelled | 32.0 | 25 | Superfamily: YrdC/RibB Family: YrdC-like |
| 30 | d1r89a1 | Alignment | not modelled | 25.7 | 33 | Fold: PAP/OAS1 substrate-binding domain Superfamily: PAP/OAS1 substrate-binding domain Family: Archaeal tRNA CCA-adding enzyme substrate-binding domain |
| 31 | d2bdva1 | Alignment | not modelled | 23.1 | 15 | Fold: BB1717-like Superfamily: BB1717-like Family: BB1717-like |
| 32 | d3pmga4 | Alignment | not modelled | 18.9 | 83 | Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain |
| 33 | d1kfi4 | Alignment | not modelled | 18.3 | 67 | Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain |
| 34 | c3f56F_ | Alignment | not modelled | 17.5 | 20 | PDB header: structural protein Chain: F: PDB Molecule: csos1d; PDBTitle: the structure of a previously undetected carboxysome shell2 protein: csos1d from prochlorococcus marinus med4 |
| 35 | d2dlxa1 | Alignment | not modelled | 17.2 | 26 | Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: UAS domain |
| 36 | c1avoA_ | Alignment | not modelled | 14.6 | 35 | PDB header: proteasome activator Chain: A: PDB Molecule: 11s regulator; PDBTitle: proteasome activator reg(alpha) |
| 37 | d1uxya2 | Alignment | not modelled | 13.8 | 17 | Fold: Uridine diphospho-N-Acetylenolpyruvylglucosamine reductase, MurB, C-terminal domain Superfamily: Uridine diphospho-N-Acetylenolpyruvylglucosamine reductase, MurB, C-terminal domain Family: Uridine diphospho-N-Acetylenolpyruvylglucosamine reductase, MurB, C-terminal domain |
| 38 | d1x87a_ | Alignment | not modelled | 13.0 | 23 | Fold: Urocanase Superfamily: Urocanase Family: Urocanase |
| 39 | c1svfB_ | Alignment | not modelled | 11.2 | 40 | PDB header: viral protein Chain: B: PDB Molecule: protein (fusion glycoprotein); PDBTitle: paramyxovirus sv5 fusion protein core |
| 40 | c2h31A_ | Alignment | not modelled | 10.9 | 10 | PDB header: ligase, lyase Chain: A: PDB Molecule: multifunctional protein ade2; PDBTitle: crystal structure of human paics, a bifunctional carboxylase and2 synthetase in purine biosynthesis |
| 41 | c1sz1A_ | Alignment | not modelled | 10.3 | 33 | PDB header: transferase/rna Chain: A: PDB Molecule: trna nucleotidyltransferase; PDBTitle: mechanism of cca-adding enzymes specificity revealed by crystal2 structures of ternary complexes |
| 42 | d2guka1 | Alignment | not modelled | 10.0 | 19 | Fold: PG1857-like Superfamily: PG1857-like Family: PG1857-like |
| 43 | d1f7da_ | Alignment | not modelled | 9.5 | 16 | Fold: beta-clip Superfamily: dUTPase-like Family: dUTPase-like |
| 44 | d1ufga_ | Alignment | not modelled | 9.3 | 28 | Fold: Immunoglobulin-like beta-sandwich Superfamily: Lamin A/C globular tail domain Family: Lamin A/C globular tail domain |
| 45 | d3orca_ | Alignment | not modelled | 8.5 | 12 | Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors |
| 46 | c3c1za_ | Alignment | not modelled | 8.0 | 13 | PDB header: dna binding protein Chain: A: PDB Molecule: dna integrity scanning protein disa; PDBTitle: structure of the ligand-free form of a bacterial dna damage2 sensor protein |
| 47 | d1lj8a4 | Alignment | not modelled | 7.9 | 15 | Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain |
| 48 | d1ak0a_ | Alignment | not modelled | 7.9 | 14 | Fold: Phospholipase C/P1 nuclease Superfamily: Phospholipase C/P1 nuclease Family: P1 nuclease |
| 49 | d2aega1 | Alignment | not modelled | 7.8 | 14 | Fold: BB1717-like Superfamily: BB1717-like Family: BB1717-like |
| 50 | c2aegA_ | Alignment | not modelled | 7.8 | 14 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein agr_pat_140; PDBTitle: x-ray crystal structure of protein atu5096 from agrobacterium2 tumefaciens. northeast structural genomics consortium target atr63. |
| 51 | c2k2wA_ | Alignment | not modelled | 7.4 | 18 | PDB header: cell cycle Chain: A: PDB Molecule: recombination and dna repair protein; PDBTitle: second brct domain of nbs1 |
| 52 | c1m2wA_ | Alignment | not modelled | 7.4 | 15 | PDB header: oxidoreductase Chain: A: PDB Molecule: mannitol dehydrogenase; PDBTitle: pseudomonas fluorescens mannitol 2-dehydrogenase ternary complex with2 nad and d-mannitol |
| 53 | d1icfi_ | Alignment | not modelled | 7.2 | 16 | Fold: Thyroglobulin type-1 domain Superfamily: Thyroglobulin type-1 domain Family: Thyroglobulin type-1 domain |
| 54 | d2bbga_ | Alignment | not modelled | 7.0 | 36 | Fold: Amb V allergen Superfamily: Amb V allergen Family: Amb V allergen |
| 55 | d2i9wa3 | Alignment | not modelled | 6.7 | 15 | Fold: Sec-C motif Superfamily: Sec-C motif |

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|----|-------------------------|-----------|--------------|-----|--|
| | | | | | Family: Sec-C motif |
| 56 | dlzsqa1 | Alignment | not modelled | 6.6 | 14 Fold: PH domain-like barrel Superfamily: PH domain-like Family: GRAM domain |
| 57 | c2oszA | Alignment | not modelled | 6.6 | 7 PDB header: structural protein Chain: A: PDB Molecule: nucleoporin p58/p45; PDBTitle: structure of nup58/45 suggests flexible nuclear pore diameter by2 intermolecular sliding |
| 58 | d1ml1a | Alignment | not modelled | 6.5 | 50 Fold: Suppressor of Fused, N-terminal domain Superfamily: Suppressor of Fused, N-terminal domain Family: Suppressor of Fused, N-terminal domain |
| 59 | d2qw7a1 | Alignment | not modelled | 6.4 | 20 Fold: OB-fold Superfamily: EutN/CcmL-like Family: EutN/CcmL-like |
| 60 | d1yira1 | Alignment | not modelled | 6.3 | 31 Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: Monomeric nicotinate phosphoribosyltransferase C-terminal domain |
| 61 | d1nkga3 | Alignment | not modelled | 6.2 | 23 Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Rhamnogalacturonase B, RhgB, N-terminal domain |
| 62 | d1tk9a | Alignment | not modelled | 6.0 | 16 Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain |
| 63 | c1ikqA | Alignment | not modelled | 6.0 | 47 PDB header: transferase Chain: A: PDB Molecule: exotoxin a; PDBTitle: pseudomonas aeruginosa exotoxin a, wild type |
| 64 | c3nohA | Alignment | not modelled | 5.9 | 33 PDB header: peptide binding protein Chain: A: PDB Molecule: putative peptide binding protein; PDBTitle: crystal structure of a putative peptide binding protein (rumgna_00914)2 from rumिनococcus gnavus atcc 29149 at 1.60 a resolution |
| 65 | c3jxoB | Alignment | not modelled | 5.8 | 15 PDB header: transport protein Chain: B: PDB Molecule: trka-n domain protein; PDBTitle: crystal structure of an octomeric two-subunit trka k+ channel ring2 gating assembly, tm1088a:tm1088b, from thermotoga maritima |
| 66 | d1f15b | Alignment | not modelled | 5.7 | 25 Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: Positive stranded ssRNA viruses Family: Bromoviridae-like VP |
| 67 | c1f15C | Alignment | not modelled | 5.7 | 25 PDB header: virus Chain: C: PDB Molecule: coat protein; PDBTitle: cucumber mosaic virus (strain fny) |
| 68 | d1z9ha1 | Alignment | not modelled | 5.6 | 11 Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain |
| 69 | d1ydua1 | Alignment | not modelled | 5.4 | 6 Fold: At5g01610-like Superfamily: At5g01610-like Family: At5g01610-like |
| 70 | d1f74a | Alignment | not modelled | 5.4 | 18 Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase |
| 71 | d1tu2b1 | Alignment | not modelled | 5.3 | 22 Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain |
| 72 | d2cqqa1 | Alignment | not modelled | 5.3 | 18 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain |
| 73 | d1olma2 | Alignment | not modelled | 5.3 | 18 Fold: Supernatant protein factor (SPF), C-terminal domain Superfamily: Supernatant protein factor (SPF), C-terminal domain Family: Supernatant protein factor (SPF), C-terminal domain |
| 74 | d2hd3a1 | Alignment | not modelled | 5.3 | 20 Fold: OB-fold Superfamily: EutN/CcmL-like Family: EutN/CcmL-like |
| 75 | c2zv4O | Alignment | not modelled | 5.3 | 23 PDB header: structural protein Chain: O: PDB Molecule: major vault protein; PDBTitle: the structure of rat liver vault at 3.5 angstrom resolution |
| 76 | d2fb5a1 | Alignment | not modelled | 5.2 | 13 Fold: Yojj-like Superfamily: Yojj-like Family: Yojj-like |
| 77 | d1ukfa | Alignment | not modelled | 5.1 | 22 Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Avirulence protein Avrpph3 |