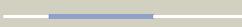
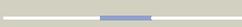
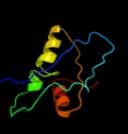
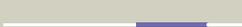
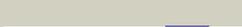
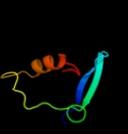


Phyre2

| | |
|---------------|-----------------------------|
| Email | I.a.kelley@imperial.ac.uk |
| Description | P39308 |
| Date | Thu Jan 5 11:59:11 GMT 2012 |
| Unique Job ID | 9dccec09a4b5ac89 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|--|
| 1 | d2atra1 |  Alignment |  | 40.4 | 13 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 2 | c3s6fA_ |  Alignment |  | 31.0 | 24 | PDB header: transferase Chain: A: PDB Molecule: hypothetical acetyltransferase; PDBTitle: crystal structure of a hypothetical acetyltransferase (dr_1678) from2 deinococcus radiodurans at 1.19 a resolution |
| 3 | d2q9oa2 |  Alignment |  | 26.0 | 22 | Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins |
| 4 | d1yf9a1 |  Alignment |  | 23.9 | 23 | Fold: UBC-like Superfamily: UBC-like Family: UBC-related |
| 5 | d1yx0a1 |  Alignment |  | 20.7 | 14 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 6 | c2xr4A_ |  Alignment |  | 19.7 | 46 | PDB header: sugar binding protein Chain: A: PDB Molecule: lectin; PDBTitle: c-terminal domain of bc2l-c lectin from burkholderia cenocepacia |
| 7 | c1m2oA_ |  Alignment |  | 19.3 | 22 | PDB header: protein transport/signaling protein Chain: A: PDB Molecule: protein transport protein sec23; PDBTitle: crystal structure of the sec23-sar1 complex |
| 8 | d2choa2 |  Alignment |  | 18.5 | 30 | Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: alpha-D-glucuronidase/Hyaluronidase catalytic domain |
| 9 | d1fjra_ |  Alignment |  | 17.7 | 23 | Fold: Methuselah ectodomain Superfamily: Methuselah ectodomain Family: Methuselah ectodomain |
| 10 | d1j58a_ |  Alignment |  | 17.3 | 22 | Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein |
| 11 | c2vnc_ |  Alignment |  | 15.6 | 31 | PDB header: sugar-binding protein Chain: C: PDB Molecule: bcla; PDBTitle: crystal structure of bcla lectin from burkholderia2 cenocepacia in complex with alpha-methyl-mannoside at 1.73 angstrom resolution |

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|----|-------------------------|-----------|--------------|------|----|--|
| 12 | c3ijrF_ | Alignment | | 15.0 | 21 | PDB header: oxidoreductase Chain: F: PDB Molecule: oxidoreductase, short chain dehydrogenase/reductase family; PDBTitle: 2.05 angstrom resolution crystal structure of a short chain2 dehydrogenase from bacillus anthracis str. 'ames ancestor' in complex3 with nad+ |
| 13 | d1ekga_ | Alignment | | 14.9 | 20 | Fold: N domain of copper amine oxidase-like Superfamily: Frataxin/Nqo15-like Family: Frataxin-like |
| 14 | d1y9wa1 | Alignment | | 14.7 | 15 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 15 | d2cbia2 | Alignment | | 14.6 | 22 | Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: alpha-D-glucuronidase/Hyaluronidase catalytic domain |
| 16 | d1c4zd_ | Alignment | | 13.3 | 19 | Fold: UBC-like Superfamily: UBC-like Family: UBC-related |
| 17 | c3nvaB_ | Alignment | | 13.1 | 20 | PDB header: ligase Chain: B: PDB Molecule: ctp synthase; PDBTitle: dimeric form of ctp synthase from sulfolobus solfataricus |
| 18 | c2boiA_ | Alignment | | 12.4 | 15 | PDB header: lectin Chain: A: PDB Molecule: cv-ii1 lectin; PDBTitle: 1.1a structure of chromobacterium violaceum lectin cv21 in2 complex with alpha-methyl-fucoside |
| 19 | d1qd1a2 | Alignment | | 12.4 | 14 | Fold: Ferredoxin-like Superfamily: Formiminotransferase domain of formiminotransferase-cyclodeaminase. Family: Formiminotransferase domain of formiminotransferase-cyclodeaminase. |
| 20 | c3gemC_ | Alignment | | 12.3 | 21 | PDB header: oxidoreductase Chain: C: PDB Molecule: short chain dehydrogenase; PDBTitle: crystal structure of short-chain dehydrogenase from pseudomonas2 syringae |
| 21 | d2nvuc1 | Alignment | not modelled | 12.0 | 16 | Fold: UBC-like Superfamily: UBC-like Family: UBC-related |
| 22 | d2chha1 | Alignment | not modelled | 11.8 | 23 | Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin |
| 23 | d1uzva_ | Alignment | not modelled | 11.4 | 23 | Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin |
| 24 | c2x1fA_ | Alignment | not modelled | 10.7 | 20 | PDB header: metal binding protein Chain: A: PDB Molecule: sll1785 protein; PDBTitle: structure and metal-loading of a soluble periplasm cupro-protein:2 apo-cuca-closed (semet) |
| 25 | d1h2ka_ | Alignment | not modelled | 10.4 | 24 | Fold: Double-stranded beta-helix Superfamily: Clavaminatase synthase-like Family: Hypoxia-inducible factor HIF inhibitor (FIH1) |
| 26 | d1k2wa_ | Alignment | not modelled | 10.2 | 17 | Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases |
| 27 | d2ga5a1 | Alignment | not modelled | 10.2 | 32 | Fold: N domain of copper amine oxidase-like Superfamily: Frataxin/Nqo15-like Family: Frataxin-like |
| 28 | d1xeba_ | Alignment | not modelled | 9.7 | 26 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 29 | c2xsba_ | Alignment | not modelled | 9.6 | 22 | PDB header: hydrolase Chain: A: PDB Molecule: hyaluronoglucosaminidase; |

| | | | | | | |
|----|-------------------------|-----------|--------------|-----|----|---|
| | | | | | | PDBTitle: ogoga pugnac complex |
| 30 | c3o2uB_ | Alignment | not modelled | 9.5 | 19 | PDB header: ligase Chain: B: PDB Molecule: nedd8-conjugating enzyme ubc12; PDBTitle: s. cerevisiae ubc12 |
| 31 | c2l7lB_ | Alignment | not modelled | 9.2 | 70 | PDB header: metal binding protein/transferase Chain: B: PDB Molecule: calcium/calmodulin-dependent protein kinase type 1; PDBTitle: solution structure of ca2+/calmodulin complexed with a peptide2 representing the calmodulin-binding domain of calmodulin kinase i |
| 32 | c2jtmA_ | Alignment | not modelled | 8.9 | 34 | PDB header: dna binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of sso6901 from sulfobolus solfataricus2 p2 |
| 33 | c2vxkA_ | Alignment | not modelled | 8.9 | 18 | PDB header: transferase Chain: A: PDB Molecule: glucosamine 6-phosphate acetyltransferase; PDBTitle: structural comparison between aspergillus fumigatus and2 human gna1 |
| 34 | c2npiD_ | Alignment | not modelled | 8.8 | 50 | PDB header: transcription Chain: D: PDB Molecule: protein pcf11; PDBTitle: clp1-atp-pcf11 complex |
| 35 | c1mxeE_ | Alignment | not modelled | 8.8 | 70 | PDB header: metal binding protein Chain: E: PDB Molecule: target sequence of rat calmodulin-dependent PDBTitle: structure of the complex of calmodulin with the target2 sequence of camki |
| 36 | c1mxeF_ | Alignment | not modelled | 8.8 | 70 | PDB header: metal binding protein Chain: F: PDB Molecule: target sequence of rat calmodulin-dependent PDBTitle: structure of the complex of calmodulin with the target2 sequence of camki |
| 37 | c3gzaB_ | Alignment | not modelled | 8.8 | 15 | PDB header: hydrolase Chain: B: PDB Molecule: putative alpha-l-fucosidase; PDBTitle: crystal structure of putative alpha-l-fucosidase (np_812709.1) from2 bacteroides thetaiotaomicron vpi-5482 at 1.60 a resolution |
| 38 | c2du7C_ | Alignment | not modelled | 8.8 | 20 | PDB header: ligase Chain: C: PDB Molecule: o-phosphoseryl-trna synthetase; PDBTitle: crystal structure of methanococcus jannacshii o-phosphoseryl-trna2 synthetase |
| 39 | d1hywa_ | Alignment | not modelled | 8.2 | 42 | Fold: gpW/XkdW-like Superfamily: Head-to-tail joining protein W, gpW Family: Head-to-tail joining protein W, gpW |
| 40 | d1su3a1 | Alignment | not modelled | 7.9 | 44 | Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain |
| 41 | c2cbjA_ | Alignment | not modelled | 7.5 | 22 | PDB header: hydrolase Chain: A: PDB Molecule: hyaluronidase; PDBTitle: structure of the clostridium perfringens nagj family 842 glycoside hydrolase, a homologue of human o-glcnacase in3 complex with pugnac |
| 42 | d2ae6a1 | Alignment | not modelled | 7.5 | 11 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 43 | c2qj8B_ | Alignment | not modelled | 7.3 | 18 | PDB header: hydrolase Chain: B: PDB Molecule: mlr6093 protein; PDBTitle: crystal structure of an aspartoacylase family protein (mlr6093) from2 mesorhizobium loti maff303099 at 2.00 a resolution |
| 44 | d1o8ba1 | Alignment | not modelled | 7.2 | 27 | Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain |
| 45 | d1fasa_ | Alignment | not modelled | 7.0 | 60 | Fold: Snake toxin-like Superfamily: Snake toxin-like Family: Snake venom toxins |
| 46 | d1ed7a_ | Alignment | not modelled | 7.0 | 42 | Fold: WW domain-like Superfamily: Carbohydrate binding domain Family: Carbohydrate binding domain |
| 47 | d2jdca1 | Alignment | not modelled | 6.7 | 13 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 48 | c3pvlA_ | Alignment | not modelled | 6.7 | 20 | PDB header: motor protein/protein transport Chain: A: PDB Molecule: myosin viia isoform 1; PDBTitle: structure of myosin viia myth4-ferm-sh3 in complex with the cen1 of2 sans |
| 49 | d2fiwa1 | Alignment | not modelled | 6.5 | 17 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 50 | d1slma1 | Alignment | not modelled | 6.3 | 57 | Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain |
| 51 | d1wzva1 | Alignment | not modelled | 6.2 | 20 | Fold: UBC-like Superfamily: UBC-like Family: UBC-related |
| 52 | d2fd6u1 | Alignment | not modelled | 6.1 | 14 | Fold: Snake toxin-like Superfamily: Snake toxin-like Family: Extracellular domain of cell surface receptors |
| 53 | d1ejda_ | Alignment | not modelled | 6.1 | 16 | Fold: IF3-like Superfamily: EPT/RTPC-like Family: Enolpyruvate transferase, EPT |
| | | | | | | Fold: NIF3 (NGG1p interacting factor 3)-like |

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|----|-------------------------|-----------|--------------|-----|----|---|
| 54 | d2gx8a1 | Alignment | not modelled | 6.1 | 23 | Superfamily: NIF3 (NGG1p interacting factor 3)-like Family: NIF3 (NGG1p interacting factor 3)-like |
| 55 | d1xs8a_ | Alignment | not modelled | 6.0 | 23 | Fold: YggX-like Superfamily: YggX-like Family: YggX-like |
| 56 | d2qtva3 | Alignment | not modelled | 6.0 | 21 | Fold: vWA-like Superfamily: vWA-like Family: Trunk domain of Sec23/24 |
| 57 | d1ew4a_ | Alignment | not modelled | 6.0 | 15 | Fold: N domain of copper amine oxidase-like Superfamily: Frataxin/Nqo15-like Family: Frataxin-like |
| 58 | d1yvoa1 | Alignment | not modelled | 5.7 | 18 | Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT |
| 59 | d1bwva2 | Alignment | not modelled | 5.6 | 18 | Fold: Ferredoxin-like Superfamily: RuBisCO, large subunit, small (N-terminal) domain Family: Ribulose 1,5-bisphosphate carboxylase-oxygenase |
| 60 | d2r7ca2 | Alignment | not modelled | 5.5 | 33 | Fold: Rotavirus NSP2 fragment, N-terminal domain Superfamily: Rotavirus NSP2 fragment, N-terminal domain Family: Rotavirus NSP2 fragment, N-terminal domain |
| 61 | c3iuwA_ | Alignment | not modelled | 5.5 | 46 | PDB header: rna binding protein Chain: A: PDB Molecule: activating signal cointegrator; PDBTitle: crystal structure of activating signal cointegrator (np_814290.1) from2 enterococcus faecalis v583 at 1.58 a resolution |
| 62 | c2pdoG_ | Alignment | not modelled | 5.2 | 21 | PDB header: transferase Chain: G: PDB Molecule: acetyltransferase ypea; PDBTitle: crystal structure of the putative acetyltransferase of gnat family2 from shigella flexneri |
| 63 | c1ic1A_ | Alignment | not modelled | 5.2 | 40 | PDB header: de novo protein Chain: A: PDB Molecule: th1ox; PDBTitle: solution structure of designed beta-sheet mini-protein th1ox |
| 64 | d1o8bb1 | Alignment | not modelled | 5.1 | 27 | Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain |
| 65 | d1j7db_ | Alignment | not modelled | 5.1 | 29 | Fold: UBC-like Superfamily: UBC-like Family: UBC-related |
| 66 | c2w7tA_ | Alignment | not modelled | 5.1 | 22 | PDB header: ligase Chain: A: PDB Molecule: putative cytidine triphosphate synthase; PDBTitle: trypanosoma brucei ctps - glutaminase domain with bound2 acivicin |
| 67 | d1yq2a2 | Alignment | not modelled | 5.1 | 29 | Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain |
| 68 | d1n10a2 | Alignment | not modelled | 5.1 | 43 | Fold: Double psi beta-barrel Superfamily: Barwin-like endoglucanases Family: Pollen allergen PHL P 1 N-terminal domain |