








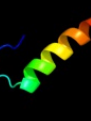













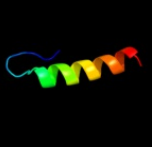
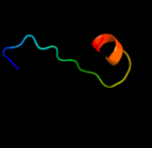
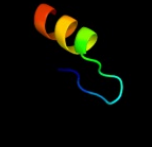
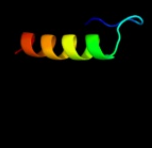



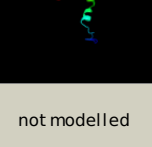


Phyre2

| | |
|---------------|-----------------------------|
| Email | l.a.kelley@imperial.ac.uk |
| Description | P76148 |
| Date | Thu Jan 5 12:19:42 GMT 2012 |
| Unique Job ID | a7671a05e664c9cc |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|---|
| 1 | c3fybA_ |  Alignment |  | 80.6 | 50 | PDB header: structural genomics, unknown function Chain: A; PDB Molecule: protein of unknown function (duf1244); PDBTitle: crystal structure of a protein of unknown function (duf1244) from <i>alcanivorax borkumensis</i> |
| 2 | c2o35A_ |  Alignment |  | 78.4 | 46 | PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein duf1244; PDBTitle: protein of unknown function (duf1244) from <i>sinorhizobium meliloti</i> |
| 3 | d2o35a1 |  Alignment |  | 78.4 | 46 | Fold: SMC04008-like Superfamily: SMC04008-like Family: SMC04008-like |
| 4 | c2ogeC_ |  Alignment |  | 48.0 | 20 | PDB header: transferase Chain: C; PDB Molecule: transaminase; PDBTitle: x-ray structure of <i>s. venezuelae</i> desv in its internal 2 aldimine form |
| 5 | c3uwCA_ |  Alignment |  | 46.8 | 23 | PDB header: transferase Chain: A; PDB Molecule: nucleotide-sugar aminotransferase; PDBTitle: structure of an aminotransferase (degt-dnrj-eryc1-strs family) from <i>coxiella burnetii</i> in complex with pmp |
| 6 | c3frkB_ |  Alignment |  | 44.7 | 27 | PDB header: transferase Chain: B; PDB Molecule: qdtb; PDBTitle: x-ray structure of qdtb from <i>t. thermosaccharolyticum</i> in 2 complex with a plp:tdp-3-aminoquinovose aldimine |
| 7 | c3htkC_ |  Alignment |  | 35.8 | 17 | PDB header: recombination/replication/ligase Chain: C; PDB Molecule: e3 sumo-protein ligase mms21; PDBTitle: crystal structure of mms21 and smc5 complex |
| 8 | d1o69a_ |  Alignment |  | 34.9 | 21 | Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like |
| 9 | c3bcxA_ |  Alignment |  | 34.3 | 16 | PDB header: transferase Chain: A; PDB Molecule: cdp-6-deoxy-l-threo-d-glycero-4-hexulose-3- PDBTitle: e1 dehydrase |
| 10 | d1wpba_ |  Alignment |  | 33.9 | 27 | Fold: YfbU-like Superfamily: YfbU-like Family: YfbU-like |
| 11 | c3nysA_ |  Alignment |  | 26.8 | 17 | PDB header: transferase Chain: A; PDB Molecule: aminotransferase wbpe; PDBTitle: x-ray structure of the k185a mutant of wbpe (wlbe) from <i>pseudomonas2 aeruginosa</i> in complex with plp at 1.45 angstrom resolution |

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|----|-------------------------|-----------|---|------|----|--|
| 12 | d1hj3a1 | Alignment |  | 26.5 | 29 | Fold: Cytochrome c Superfamily: Cytochrome c Family: N-terminal (heme c) domain of cytochrome cd1-nitrite reductase |
| 13 | c2po3B_ | Alignment |  | 25.9 | 12 | PDB header: transferase Chain: B: PDB Molecule: 4-dehydrase; PDBTitle: crystal structure analysis of desi in the presence of its2 tdp-sugar product |
| 14 | c2k6vA_ | Alignment |  | 25.8 | 18 | PDB header: electron transport Chain: A: PDB Molecule: putative cytochrome c oxidase assembly protein; PDBTitle: solution structures of apo sco1 protein from thermus2 thermophilus |
| 15 | c3ju7B_ | Alignment |  | 24.0 | 21 | PDB header: transferase Chain: B: PDB Molecule: putative plp-dependent aminotransferase; PDBTitle: crystal structure of putative plp-dependent aminotransferase2 (np_978343.1) from bacillus cereus atcc 10987 at 2.19 a resolution |
| 16 | d2fnua1 | Alignment |  | 22.5 | 17 | Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like |
| 17 | c2rliA_ | Alignment |  | 22.4 | 30 | PDB header: metal transport Chain: A: PDB Molecule: sco2 protein homolog, mitochondrial; PDBTitle: solution structure of cu(i) human sco2 |
| 18 | c2kvcA_ | Alignment |  | 22.1 | 11 | PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of the mycobacterium tuberculosis protein rv0543c,2 a member of the duf3349 superfamily. seattle structural genomics3 center for infectious disease target mytud.17112.a |
| 19 | c2r0tA_ | Alignment |  | 20.5 | 11 | PDB header: transferase Chain: A: PDB Molecule: pyridoxamine 5-phosphate-dependent dehydratase; PDBTitle: crystal sructure of gdp-4-keto-6-deoxymannose-3-dehydratase2 with a trapped plp-glutamate geminal diamine |
| 20 | c1jiwP_ | Alignment |  | 20.5 | 35 | PDB header: hydrolase/hyrolase inhibitor Chain: P: PDB Molecule: alkaline metalloproteinase; PDBTitle: crystal structure of the apr-aprin complex |
| 21 | c3gxqB_ | Alignment | not modelled | 18.0 | 25 | PDB header: dna binding protein/dna Chain: B: PDB Molecule: putative regulator of transfer genes arta; PDBTitle: structure of arta and dna complex |
| 22 | d1riea_ | Alignment | not modelled | 18.0 | 25 | Fold: ISP domain Superfamily: ISP domain Family: Rieske iron-sulfur protein (ISP) |
| 23 | c2kreA_ | Alignment | not modelled | 17.2 | 25 | PDB header: protein binding Chain: A: PDB Molecule: ubiquitin conjugation factor e4 b; PDBTitle: solution structure of e4b/ufd2a u-box domain |
| 24 | c2nvqA_ | Alignment | not modelled | 16.1 | 20 | PDB header: oxidoreductase Chain: A: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit; PDBTitle: soluble domain of rieske iron sulfur protein. |
| 25 | c2k0mA_ | Alignment | not modelled | 14.9 | 12 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of the uncharacterized protein from2 rhodospirillum rubrum gene locus rru_a0810. northeast3 structural genomics target rrr43 |
| 26 | d1wgma_ | Alignment | not modelled | 14.6 | 24 | Fold: RING/U-box Superfamily: RING/U-box Family: U-box |
| 27 | c2b7kD_ | Alignment | not modelled | 14.3 | 22 | PDB header: metal binding protein Chain: D: PDB Molecule: sco1 protein; PDBTitle: crystal structure of yeast sco1 |
| 28 | d2k4xa1 | Alignment | not modelled | 14.2 | 61 | Fold: Rubredoxin-like Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein S27a |
| | | | | | | PDB header: hydrolase |

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|----|-------------------------|-----------|--------------|-----|----|--|
| 54 | d1a56a_ | Alignment | not modelled | 9.5 | 19 | Superfamily: Cytochrome c Family: monodomain cytochrome c |
| 55 | d1t1ha_ | Alignment | not modelled | 9.5 | 38 | Fold: RING/U-box Superfamily: RING/U-box Family: U-box |
| 56 | c3dr4B_ | Alignment | not modelled | 9.5 | 22 | PDB header: transferase Chain: B: PDB Molecule: putative perosamine synthetase; PDBTitle: gdp-perosamine synthase k186a mutant from caulobacter2 crescentus with bound sugar ligand |
| 57 | c2djba_ | Alignment | not modelled | 9.4 | 30 | PDB header: gene regulation Chain: A: PDB Molecule: polycomb group ring finger protein 6; PDBTitle: solution structure of the ring domain of the human polycomb2 group ring finger protein 6 |
| 58 | c2kveA_ | Alignment | not modelled | 9.4 | 57 | PDB header: hormone Chain: A: PDB Molecule: mesencephalic astrocyte-derived neurotrophic factor; PDBTitle: c-terminal domain of mesencephalic astrocyte-derived neurotrophic2 factor (manf) |
| 59 | c3bijC_ | Alignment | not modelled | 9.4 | 38 | PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein gsu0716; PDBTitle: crystal structure of protein gsu0716 from geobacter2 sulfurreducens. northeast structural genomics target gsr13 |
| 60 | c2ecwA_ | Alignment | not modelled | 9.3 | 30 | PDB header: apoptosis Chain: A: PDB Molecule: tripartite motif-containing protein 30; PDBTitle: solution structure of the zinc finger, c3hc4 type (ring2 finger) domain tripartite motif protein 30 |
| 61 | c2eciA_ | Alignment | not modelled | 9.2 | 30 | PDB header: metal binding protein Chain: A: PDB Molecule: tnf receptor-associated factor 6; PDBTitle: solution structure of the ring domain of the human tnf2 receptor-associated factor 6 protein |
| 62 | d2tpa1 | Alignment | not modelled | 9.1 | 33 | Fold: Methionine synthase domain-like Superfamily: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain Family: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain |
| 63 | d1ur6b_ | Alignment | not modelled | 8.8 | 38 | Fold: RING/U-box Superfamily: RING/U-box Family: RING finger domain, C3HC4 |
| 64 | d3cx5e1 | Alignment | not modelled | 8.6 | 35 | Fold: ISP domain Superfamily: ISP domain Family: Rieske iron-sulfur protein (ISP) |
| 65 | c2ecjA_ | Alignment | not modelled | 8.6 | 18 | PDB header: metal binding protein Chain: A: PDB Molecule: tripartite motif-containing protein 39; PDBTitle: solution structure of the ring domain of the human2 tripartite motif-containing protein 39 |
| 66 | c2w9vA_ | Alignment | not modelled | 8.5 | 63 | PDB header: toxin Chain: A: PDB Molecule: short disintegrin jerdostatin; PDBTitle: solution structure of jerdostatin from trimeresurus2 jerdonii with end c-terminal residues n45g46 deleted |
| 67 | c2y43B_ | Alignment | not modelled | 8.2 | 30 | PDB header: ligase Chain: B: PDB Molecule: e3 ubiquitin-protein ligase rad18; PDBTitle: rad18 ubiquitin ligase ring domain structure |
| 68 | c4a5bA_ | Alignment | not modelled | 8.1 | 19 | PDB header: hydrolase Chain: A: PDB Molecule: nucleoside-triphosphatase 2; PDBTitle: crystal structure of the c258s/c268s variant of toxoplasma gondii2 nucleoside triphosphate diphosphohydrolase 1 (ntpdase1) |
| 69 | d1jm7a_ | Alignment | not modelled | 8.0 | 38 | Fold: RING/U-box Superfamily: RING/U-box Family: RING finger domain, C3HC4 |
| 70 | d2elca1 | Alignment | not modelled | 7.9 | 24 | Fold: Methionine synthase domain-like Superfamily: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain Family: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain |
| 71 | d2b7ka1 | Alignment | not modelled | 7.8 | 22 | Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like |
| 72 | c3ztga_ | Alignment | not modelled | 7.7 | 20 | PDB header: ligase Chain: A: PDB Molecule: e3 ubiquitin-protein ligase rbbp6; PDBTitle: solution structure of the ring finger-like domain of2 retinoblastoma binding protein-6 (rbbp6) |
| 73 | c2y3aB_ | Alignment | not modelled | 7.7 | 28 | PDB header: transferase Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit beta; PDBTitle: crystal structure of p110beta in complex with icsh2 of p85beta and2 the drug gdc-0941 |
| 74 | d1uoua1 | Alignment | not modelled | 7.6 | 37 | Fold: Methionine synthase domain-like Superfamily: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain Family: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain |
| 75 | c3l11A_ | Alignment | not modelled | 7.5 | 25 | PDB header: ligase Chain: A: PDB Molecule: e3 ubiquitin-protein ligase rnf168; PDBTitle: crystal structure of the ring domain of rnf168 |
| 76 | d1ng7a_ | Alignment | not modelled | 7.4 | 56 | Fold: Soluble domain of poliovirus core protein 3a Superfamily: Soluble domain of poliovirus core protein 3a Family: Soluble domain of poliovirus core protein 3a |
| 77 | d2cwqa1 | Alignment | not modelled | 7.3 | 19 | Fold: AhpD-like Superfamily: AhpD-like Family: TTHA0727-like |
| 78 | c2h0dB_ | Alignment | not modelled | 7.2 | 25 | PDB header: metal binding protein/ligase Chain: B: PDB Molecule: ubiquitin ligase protein ring2; PDBTitle: structure of a bmi-1-ring1b polycomb group ubiquitin ligase complex |
| | | | | | | PDB header: transferase |

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|----|-------------------------|-----------|--------------|-----|----|--|
| 79 | c3sqgG_ | Alignment | not modelled | 7.2 | 50 | Chain: G: PDB Molecule: methyl coenzyme m reductase, alpha subunit; PDBTitle: crystal structure of a methyl-coenzyme m reductase purified from black2 sea mats |
| 80 | d1k78a1 | Alignment | not modelled | 7.1 | 22 | Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Paired domain |
| 81 | c2yu4A_ | Alignment | not modelled | 7.1 | 0 | PDB header: apoptosis Chain: A: PDB Molecule: e3 sumo-protein ligase nse2; PDBTitle: solution structure of the sp-ring domain in non-smc element2 2 homolog (mms21, s. cerevisiae) |
| 82 | d1v8ga1 | Alignment | not modelled | 6.9 | 24 | Fold: Methionine synthase domain-like Superfamily: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain Family: Nucleoside phosphorylase/phosphoribosyltransferase N-terminal domain |
| 83 | c2csyA_ | Alignment | not modelled | 6.8 | 25 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: zinc finger protein 183-like 1; PDBTitle: solution structure of the ring domain of the zinc finger2 protein 183-like 1 |
| 84 | c1tr6A_ | Alignment | not modelled | 6.7 | 80 | PDB header: toxin Chain: A: PDB Molecule: omega-conotoxin gvia; PDBTitle: nmr solution structure of omega-conotoxin [k10]gvia, a cyclic cysteine2 knot peptide |
| 85 | c1omcA_ | Alignment | not modelled | 6.7 | 80 | PDB header: presynaptic neurotoxin Chain: A: PDB Molecule: omega-conotoxin gvia; PDBTitle: solution structure of omega-conotoxin gvia using 2-d nmr2 spectroscopy and relaxation matrix analysis |
| 86 | c2ccoA_ | Alignment | not modelled | 6.7 | 80 | PDB header: toxin Chain: A: PDB Molecule: omega-conotoxin gvia; PDBTitle: structure of the calcium channel blocker omega conotoxin2 gvia, nmr, 20 structures |
| 87 | d1omca_ | Alignment | not modelled | 6.7 | 80 | Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: omega toxin-like Family: Conotoxin |
| 88 | c1tt4A_ | Alignment | not modelled | 6.7 | 80 | PDB header: toxin Chain: A: PDB Molecule: omega-conotoxin gvia; PDBTitle: omega-conotoxin gvia, a n-type calcium channel blocker |
| 89 | c3tqcB_ | Alignment | not modelled | 6.7 | 26 | PDB header: transferase Chain: B: PDB Molecule: pantothenate kinase; PDBTitle: structure of the pantothenate kinase (coaA) from coxiella burnetii |
| 90 | d1vyxa_ | Alignment | not modelled | 6.6 | 50 | Fold: RING/U-box Superfamily: RING/U-box Family: Variant RING domain |
| 91 | d1st9a_ | Alignment | not modelled | 6.6 | 21 | Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like |
| 92 | c3knvA_ | Alignment | not modelled | 6.5 | 50 | PDB header: signaling protein Chain: A: PDB Molecule: tnfr receptor-associated factor 2; PDBTitle: crystal structure of the ring and first zinc finger domains2 of traf2 |
| 93 | d1c75a_ | Alignment | not modelled | 6.4 | 16 | Fold: Cytochrome c Superfamily: Cytochrome c Family: monodomain cytochrome c |
| 94 | d2b5xa1 | Alignment | not modelled | 6.4 | 24 | Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like |
| 95 | c1nhgD_ | Alignment | not modelled | 6.3 | 10 | PDB header: oxidoreductase Chain: D: PDB Molecule: enoyl-acyl carrier reductase; PDBTitle: crystal structure analysis of plasmodium falciparum enoyl-2 acyl-carrier-protein reductase with triclosan |
| 96 | c3f6oB_ | Alignment | not modelled | 6.3 | 12 | PDB header: transcription regulator Chain: B: PDB Molecule: probable transcriptional regulator, arsr family PDBTitle: crystal structure of arsr family transcriptional regulator,2 rha00566 |
| 97 | c2oixA_ | Alignment | not modelled | 6.3 | 36 | PDB header: hydrolase Chain: A: PDB Molecule: xanthomonas outer protein d; PDBTitle: xanthomonas xopd c470a mutant |
| 98 | d1gp1a_ | Alignment | not modelled | 6.2 | 22 | Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like |
| 99 | c3jvbA_ | Alignment | not modelled | 6.2 | 83 | PDB header: viral protein Chain: A: PDB Molecule: polyhedrin; PDBTitle: crystal structure of infectious baculovirus polyhedra |