

Phyre²

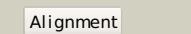
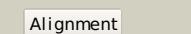
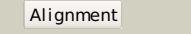
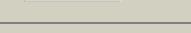
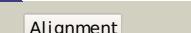
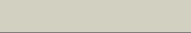
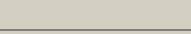
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|---------------|--------------------------------|
| Email | i.a.kelley@imperial.ac.uk |
| Description | P0A7D1 |
| Date | Thu Jan 5 11:05:23 GMT 2012 |
| Unique Job ID | 13e506d27d061295 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|----------|--------------------|---|------------|--------|---|
| 1 | d2ptha_ | Alignment |  | 100.0 | 100 | Fold: Phosphorylase/hydrolase-like Superfamily: Peptidyl-tRNA hydrolase-like Family: Peptidyl-tRNA hydrolase-like |
| 2 | c3neaA_ | Alignment |  | 100.0 | 44 | PDB header: hydrolase Chain: A; PDB Molecule: peptidyl-tRNA hydrolase; PDBTitle: crystal structure of peptidyl-tRNA hydrolase from francisella2 tularensis |
| 3 | c3v2iA_ | Alignment |  | 100.0 | 56 | PDB header: hydrolase Chain: A; PDB Molecule: peptidyl-tRNA hydrolase; PDBTitle: structure of a peptidyl-tRNA hydrolase (pth) from burkholderia2 thailandensis |
| 4 | c2z2jA_ | Alignment |  | 100.0 | 39 | PDB header: hydrolase Chain: A; PDB Molecule: peptidyl-tRNA hydrolase; PDBTitle: crystal structure of peptidyl-tRNA hydrolase from mycobacterium2 tuberculosis |
| 5 | d1ryba_ | Alignment |  | 100.0 | 33 | Fold: Phosphorylase/hydrolase-like Superfamily: Peptidyl-tRNA hydrolase-like Family: Peptidyl-tRNA hydrolase-like |
| 6 | d1cfza_ | Alignment |  | 83.8 | 28 | Fold: Phosphorylase/hydrolase-like Superfamily: HybD-like Family: Hydrogenase maturing endopeptidase HybD |
| 7 | c2e85B_ | Alignment |  | 76.7 | 13 | PDB header: hydrolase Chain: B; PDB Molecule: hydrogenase 3 maturation protease; PDBTitle: crystal structure of the hydrogenase 3 maturation protease |
| 8 | d1c8ba_ | Alignment |  | 50.1 | 43 | Fold: Phosphorylase/hydrolase-like Superfamily: HybD-like Family: Germination protease |
| 9 | c2jvaA_ | Alignment |  | 39.2 | 30 | PDB header: hydrolase Chain: A; PDB Molecule: peptidyl-tRNA hydrolase domain protein; PDBTitle: nmr solution structure of peptidyl-tRNA hydrolase domain protein from2 pseudomonas syringae pv. tomato. northeast structural genomics3 consortium target psr211 |
| 10 | d2ea9a1 | Alignment |  | 36.7 | 24 | Fold: Profilin-like Superfamily: YeeU-like Family: YagB/YeeU/YfjZ-like |
| 11 | d2inwa1 | Alignment |  | 34.8 | 21 | Fold: Profilin-like Superfamily: YeeU-like Family: YagB/YeeU/YfjZ-like |

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|----|-------------------------|--|--------------|------|----|--|
| 12 | c3tgtA | | | 33.9 | 17 | PDB header: transcription Chain: A: PDB Molecule: adc operon repressor adcr; PDBTitle: crystal structure of the zinc-dependent marr family transcriptional2 regulator adcr in the zn(ii)-bound state |
| 13 | d2h28a1 | | | 33.0 | 21 | Fold: Profilin-like Superfamily: YeeU-like Family: YagB/YeeU/YfjZ-like |
| 14 | c2jy9A | | | 32.4 | 11 | PDB header: hydrolase Chain: A: PDB Molecule: putative trna hydrolase domain; PDBTitle: nmr structure of putative trna hydrolase domain from salmonella typhimurium. northeast structural genomics3 consortium target str220 |
| 15 | c3pu6A | | | 31.8 | 18 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of an uncharacterized protein from wolinella2 succinogenes |
| 16 | c3mpoD | | | 23.3 | 11 | PDB header: hydrolase Chain: D: PDB Molecule: predicted hydrolase of the had superfamily; PDBTitle: the crystal structure of a hydrolase from lactobacillus brevis |
| 17 | c3gygA | | | 21.0 | 13 | PDB header: hydrolase Chain: A: PDB Molecule: ntd biosynthesis operon putative hydrolase ntbd; PDBTitle: crystal structure of yhjk (haloacid dehalogenase-like hydrolase2 protein) from bacillus subtilis |
| 18 | d1am7a | | | 20.5 | 12 | Fold: Lysozyme-like Superfamily: Lysozyme-like Family: Lambda lysozyme |
| 19 | c3ippA | | | 20.4 | 15 | PDB header: transferase Chain: A: PDB Molecule: putative thiosulfate sulfurtransferase ynj;e; PDBTitle: crystal structure of sulfur-free ynj;e |
| 20 | c3s2wB | | | 17.0 | 3 | PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: the crystal structure of a marr transcriptional regulator from2 methanoscarcina mazei go1 |
| 21 | c2bb3B | | not modelled | 16.0 | 30 | PDB header: transferase Chain: B: PDB Molecule: cobalamin biosynthesis precorrin-6y methylase (cbie); PDBTitle: crystal structure of cobalamin biosynthesis precorrin-6y methylase2 (cbie) from archaeoglobus fulgidus |
| 22 | c1ynmA | | not modelled | 15.3 | 22 | PDB header: hydrolase Chain: A: PDB Molecule: r.hinpli restriction endonuclease; PDBTitle: crystal structure of restriction endonuclease hinpli |
| 23 | d2nqra3 | | not modelled | 15.3 | 20 | Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like |
| 24 | c3kp3B | | not modelled | 14.0 | 3 | PDB header: transcription regulator/antibiotic Chain: B: PDB Molecule: transcriptional regulator tcar; PDBTitle: staphylococcus epidermidis in complex with ampicillin |
| 25 | c3n39D | | not modelled | 13.9 | 19 | PDB header: oxidoreductase Chain: D: PDB Molecule: protein nrdi; PDBTitle: ribonucleotide reductase dimanganese(ii)-nrdf from escherichia coli in2 complex with nrdi |
| 26 | c1ujIA | | not modelled | 13.4 | 16 | PDB header: membrane protein Chain: A: PDB Molecule: potassium voltage-gated channel subfamily h PDBTitle: solution structure of the herg k+ channel s5-p2 extracellular linker |
| 27 | c3ndcB | | not modelled | 13.4 | 31 | PDB header: transferase Chain: B: PDB Molecule: precorrin-4 c(11)-methyltransferase; PDBTitle: crystal structure of precorrin-4 c11-methyltransferase from2 rhodobacter capsulatus |
| 28 | d2bb3a1 | | not modelled | 13.3 | 33 | Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase |

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|----|-------------------------|--|-----------|--------------|------|----|--|
| 29 | c3hzua | | Alignment | not modelled | 13.2 | 18 | PDB header: transferase Chain: A: PDB Molecule: thiosulfate sulfurtransferase ssea; PDBTitle: crystal structure of probable thiosulfate sulfurtransferase ssea2 (rhodanese) from mycobacterium tuberculosis |
| 30 | c2jcyA | | Alignment | not modelled | 11.8 | 33 | PDB header: oxidoreductase Chain: A: PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: x-ray structure of mutant 1-deoxy-d-xylulose 5-phosphate2 reductoisomerase, dxr, rv2870c, from mycobacterium3 tuberculosis |
| 31 | c2ofpB | | Alignment | not modelled | 10.8 | 17 | PDB header: oxidoreductase Chain: B: PDB Molecule: ketopantoate reductase; PDBTitle: crystal structure of escherichia coli ketopantoate2 reductase in a ternary complex with nadp+ and pantoate |
| 32 | d1r0ka3 | | Alignment | not modelled | 10.7 | 26 | Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Dihydrodipicolinate reductase-like |
| 33 | d1s2oa1 | | Alignment | not modelled | 10.6 | 23 | Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof |
| 34 | c3bpqD | | Alignment | not modelled | 10.4 | 39 | PDB header: toxin Chain: D: PDB Molecule: toxin relE3; PDBTitle: crystal structure of relB-relE antitoxin-toxin complex from2 methanococcus jannaschii |
| 35 | d1q0qa3 | | Alignment | not modelled | 10.3 | 22 | Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Dihydrodipicolinate reductase-like |
| 36 | c3e8mD | | Alignment | not modelled | 10.1 | 19 | PDB header: transferase Chain: D: PDB Molecule: acylneuraminate cytidyltransferase; PDBTitle: structure-function analysis of 2-keto-3-deoxy-d-glycerod-galacto-2 nononate-9-phosphate (kdn) phosphatase defines a new clad within the3 type c0 had subfamily |
| 37 | c3ecoB | | Alignment | not modelled | 9.9 | 3 | PDB header: transcription Chain: B: PDB Molecule: mepr; PDBTitle: crystal structure of mepr, a transcription regulator of the2 staphylococcus aureus multidrug efflux pump mepa |
| 38 | c3av6A | | Alignment | not modelled | 9.8 | 23 | PDB header: transferase Chain: A: PDB Molecule: dna (cytosine-5)-methyltransferase 1; PDBTitle: crystal structure of mouse dna methyltransferase 1 with adomet |
| 39 | d1lama2 | | Alignment | not modelled | 9.8 | 25 | Fold: Macro domain-like Superfamily: Macro domain-like Family: Leucine aminopeptidase (Aminopeptidase A), N-terminal domain |
| 40 | c3euwB | | Alignment | not modelled | 9.7 | 19 | PDB header: oxidoreductase Chain: B: PDB Molecule: myo-inositol dehydrogenase; PDBTitle: crystal structure of a myo-inositol dehydrogenase from corynebacterium2 glutamicum atcc 13032 |
| 41 | c3n1uA | | Alignment | not modelled | 9.5 | 23 | PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, had superfamily, subfamily iii a; PDBTitle: structure of putative had superfamily (subfamily iii a) hydrolase from2 legionella pneumophila |
| 42 | c3bj6B | | Alignment | not modelled | 9.0 | 6 | PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of marr family transcription regulator sp03579 |
| 43 | cluarA | | Alignment | not modelled | 9.0 | 19 | PDB header: transferase Chain: A: PDB Molecule: rhodanese; PDBTitle: crystal structure of rhodanese from thermus thermophilus hb8 |
| 44 | d3eeqa2 | | Alignment | not modelled | 8.9 | 22 | Fold: CbiG N-terminal domain-like Superfamily: CbiG N-terminal domain-like Family: CbiG N-terminal domain-like |
| 45 | d2bgxa2 | | Alignment | not modelled | 8.7 | 15 | Fold: N-acetyl muramoyl-L-alanine amidase-like Superfamily: N-acetyl muramoyl-L-alanine amidase-like Family: N-acetyl muramoyl-L-alanine amidase-like |
| 46 | d1fima | | Alignment | not modelled | 8.3 | 14 | Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MIF-related |
| 47 | d1bofa2 | | Alignment | not modelled | 8.0 | 27 | Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins |
| 48 | d1wvia | | Alignment | not modelled | 8.0 | 7 | Fold: HAD-like Superfamily: HAD-like Family: NagD-like |
| 49 | c3rfqC | | Alignment | not modelled | 7.4 | 14 | PDB header: biosynthetic protein Chain: C: PDB Molecule: pterin-4-alpha-carbinolamine dehydratase moab2; PDBTitle: crystal structure of pterin-4-alpha-carbinolamine dehydratase moab22 from mycobacterium marinum |
| 50 | d1mv8a2 | | Alignment | not modelled | 7.3 | 30 | Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain |
| 51 | c3ikmD | | Alignment | not modelled | 7.3 | 26 | PDB header: transferase Chain: D: PDB Molecule: dna polymerase subunit gamma-1; PDBTitle: crystal structure of human mitochondrial dna polymerase2 holoenzyme |
| 52 | d2etha1 | | Alignment | not modelled | 7.2 | 17 | Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators |
| 53 | d2nu7b2 | | Alianment | not modelled | 7.1 | 18 | Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like |

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|----|-------------------------|---|-----------|--------------|-----|--|
| | | | | | | Family: Succinyl-CoA synthetase, beta-chain, N-terminal domain |
| 54 | c3fzqA |  | Alignment | not modelled | 7.1 | 19 PDB header: hydrolase Chain: A: PDB Molecule: putative hydrolase; PDBTitle: crystal structure of putative haloacid dehalogenase-like hydrolase2 (yp_001086940.1) from clostridium difficile 630 at 2.10 a resolution |
| 55 | c2bh7A |  | Alignment | not modelled | 7.1 | 15 PDB header: hydrolase Chain: A: PDB Molecule: n-acetyl muramoyl-l-alanine amidase; PDBTitle: crystal structure of a semet derivative of amid at 2.22 angstroms |
| 56 | c2zetD |  | Alignment | not modelled | 7.1 | 9 PDB header: signaling protein Chain: D: PDB Molecule: melanophillin; PDBTitle: crystal structure of the small gtpase rab27b complexed with2 the slp homology domain of slac2-a/melanophillin |
| 57 | d1kleA |  | Alignment | not modelled | 7.0 | 8 Fold: HAD-like Superfamily: HAD-like Family: Probable phosphatase Yrb1 |
| 58 | c3r6mD |  | Alignment | not modelled | 6.9 | 29 PDB header: hydrolase Chain: D: PDB Molecule: yeaz, resuscitation promoting factor; PDBTitle: crystal structure of vibrio parahaemolyticus yeaz |
| 59 | c3I6dB |  | Alignment | not modelled | 6.9 | 20 PDB header: oxidoreductase Chain: B: PDB Molecule: putative oxidoreductase; PDBTitle: crystal structure of putative oxidoreductase from pseudomonas putida2 kt2440 |
| 60 | d2f1ka2 |  | Alignment | not modelled | 6.8 | 35 Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain |
| 61 | c3kbqA |  | Alignment | not modelled | 6.7 | 17 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein ta0487; PDBTitle: the crystal structure of the protein cina with unknown function from2 thermoplasma acidophilum |
| 62 | c1okgA |  | Alignment | not modelled | 6.7 | 5 PDB header: transferase Chain: A: PDB Molecule: possible 3-mercaptopropionate sulfurtransferase; PDBTitle: 3-mercaptopropionate sulfurtransferase from leishmania major |
| 63 | c3mn1B |  | Alignment | not modelled | 6.6 | 8 PDB header: hydrolase Chain: B: PDB Molecule: probable yrbi family phosphatase; PDBTitle: crystal structure of probable yrbi family phosphatase from pseudomonas2 syringae pv. phaseolica 1448a |
| 64 | d1ys9a1 |  | Alignment | not modelled | 6.6 | 10 Fold: HAD-like Superfamily: HAD-like Family: NagD-like |
| 65 | c2cftA |  | Alignment | not modelled | 6.5 | 23 PDB header: phosphatase Chain: A: PDB Molecule: pyridoxal phosphate phosphatase; PDBTitle: crystal structure of human pyridoxal 5'-phosphate2 phosphatase with its substrate |
| 66 | c3nt5B |  | Alignment | not modelled | 6.5 | 25 PDB header: oxidoreductase Chain: B: PDB Molecule: inositol 2-dehydrogenase/d-chiro-inositol 3-dehydrogenase; PDBTitle: crystal structure of myo-inositol dehydrogenase from bacillus subtilis2 with bound cofactor and product inosine |
| 67 | c2p9jH |  | Alignment | not modelled | 6.4 | 10 PDB header: structural genomics, unknown function Chain: H: PDB Molecule: hypothetical protein aq2171; PDBTitle: crystal structure of aq2171 from aquifex aeolicus |
| 68 | c3boqB |  | Alignment | not modelled | 6.4 | 7 PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of marr family transcriptional regulator from2 silicibacter pomeroyi |
| 69 | c2xtsD |  | Alignment | not modelled | 6.1 | 13 PDB header: oxidoreductase/electron transport Chain: D: PDB Molecule: cytochrome; PDBTitle: crystal structure of the sulfane dehydrogenase soxcd from paracoccus2 pantotrophus |
| 70 | c3oopA |  | Alignment | not modelled | 6.0 | 4 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: in2960 protein; PDBTitle: the structure of a protein with unknown function from listeria innocua2 clip11262 |
| 71 | d1gcya1 |  | Alignment | not modelled | 5.8 | 67 Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain |
| 72 | c2hx1D |  | Alignment | not modelled | 5.8 | 24 PDB header: hydrolase Chain: D: PDB Molecule: predicted sugar phosphatases of the had PDBTitle: crystal structure of possible sugar phosphatase, had2 superfamily (zp_00311070.1) from cytophaga hutchinsonii3 atcc 33406 at 2.10 a resolution |
| 73 | d2al3a1 |  | Alignment | not modelled | 5.8 | 18 Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain |
| 74 | c2r8zC |  | Alignment | not modelled | 5.6 | 19 PDB header: hydrolase Chain: C: PDB Molecule: 3-deoxy-d-manno-octulonate 8-phosphate phosphatase; PDBTitle: crystal structure of yrbi phosphatase from escherichia coli in complex2 with a phosphate and a calcium ion |
| 75 | d1yv9a1 |  | Alignment | not modelled | 5.6 | 3 Fold: HAD-like Superfamily: HAD-like Family: NagD-like |
| 76 | d1k47a2 |  | Alignment | not modelled | 5.4 | 7 Fold: Ferrodoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Phosphomevalonate kinase (PMK) |
| 77 | d1kmma1 |  | Alignment | not modelled | 5.4 | 16 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS |
| 78 | d1y5ea1 | | Alignment | not modelled | 5.4 | 10 Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MogA-like |

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|----|-------------------------|--|--------------|-----|----|--|
| 79 | d1s3ja | | not modelled | 5.3 | 14 | Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators |
| 80 | c2pjka | | not modelled | 5.3 | 10 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 178aa long hypothetical molybdenum cofactor PDBTitle: structure of hypothetical molybdenum cofactor biosynthesis2 protein b from sulfolobus tokodaii |
| 81 | d2j49a1 | | not modelled | 5.3 | 8 | Fold: Taf5 N-terminal domain-like Superfamily: Taf5 N-terminal domain-like Family: Taf5 N-terminal domain-like |
| 82 | c3e6mD | | not modelled | 5.2 | 9 | PDB header: transcription regulator Chain: D: PDB Molecule: marr family transcriptional regulator; PDBTitle: the crystal structure of a marr family transcriptional2 regulator from silicibacter pomeroyi dss. |
| 83 | c3au9A | | not modelled | 5.2 | 30 | PDB header: isomerase/isomerase inhibitor Chain: A: PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: crystal structure of the quaternary complex-1 of an isomerase |
| 84 | d1ydfa1 | | not modelled | 5.1 | 7 | Fold: HAD-like Superfamily: HAD-like Family: NagD-like |