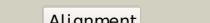
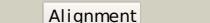
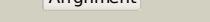
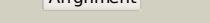
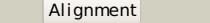
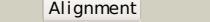
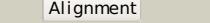
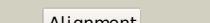


Phyre²

| | |
|---------------|-----------------------------|
| Email | I.a.kelley@imperial.ac.uk |
| Description | P0AEW4 |
| Date | Thu Jan 5 11:24:25 GMT 2012 |
| Unique Job ID | 7c6b5cecef2d4229 |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | c3ib7A_ |  |  | 100.0 | 29 | PDB header: hydrolase Chain: A: PDB Molecule: icc protein; PDBTitle: crystal structure of full length rv0805 |
| 2 | d3d03a1 |  |  | 100.0 | 21 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: GpdQ-like |
| 3 | c2hy1A_ |  |  | 100.0 | 31 | PDB header: hydrolase Chain: A: PDB Molecule: rv0805; PDBTitle: crystal structure of rv0805 |
| 4 | d2hy1a1 |  |  | 100.0 | 31 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: GpdQ-like |
| 5 | d2nxfa1 |  |  | 100.0 | 20 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: ADPRibase-Mn-like |
| 6 | c2xmoB_ |  |  | 100.0 | 21 | PDB header: hydrolase Chain: B: PDB Molecule: lmo2642 protein; PDBTitle: the crystal structure of lmo2642 |
| 7 | c3av0A_ |  |  | 100.0 | 13 | PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11-rad50 bound to atp s |
| 8 | c3auzaA_ |  |  | 100.0 | 12 | PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11 with manganese |
| 9 | c3t1iC_ |  |  | 100.0 | 17 | PDB header: hydrolase Chain: C: PDB Molecule: double-strand break repair protein mre11a; PDBTitle: crystal structure of human mre11: understanding tumorigenic mutations |
| 10 | c2q8uA_ |  |  | 99.9 | 17 | PDB header: hydrolase Chain: A: PDB Molecule: exonuclease, putative; PDBTitle: crystal structure of mre11 from thermotoga maritima msb8 (tm1635) at 2.20 a resolution |
| 11 | c3qg5D_ |  |  | 99.9 | 16 | PDB header: hydrolase Chain: D: PDB Molecule: mre11; PDBTitle: the mre11:rad50 complex forms an atp dependent molecular clamp in dna2 double-strand break repair |

| | | | | | | |
|----|-------------------------|--|--------------|------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | d1ii7a | | | 99.9 | 18 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: DNA double-strand break repair nuclease |
| 13 | d1utea | | | 99.9 | 17 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Purple acid phosphatase-like |
| 14 | d2yvta1 | | | 99.9 | 9 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: TT1561-like |
| 15 | c3qfnA | | | 99.9 | 19 | PDB header: hydrolase Chain: A; PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of streptococcal asymmetric ap4a hydrolase and2 phosphodiesterase spr1479/saph in complex with inorganic phosphate |
| 16 | d1uf3a | | | 99.9 | 13 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: TT1561-like |
| 17 | c1qhwA | | | 99.9 | 17 | PDB header: hydrolase Chain: A; PDB Molecule: protein (purple acid phosphatase); PDBTitle: purple acid phosphatase from rat bone |
| 18 | d1qhwa | | | 99.9 | 17 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Purple acid phosphatase-like |
| 19 | d1xzwa2 | | | 99.9 | 15 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Purple acid phosphatase-like |
| 20 | d2qfra2 | | | 99.9 | 17 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Purple acid phosphatase-like |
| 21 | c3rl4A | | not modelled | 99.9 | 19 | PDB header: hydrolase Chain: A; PDB Molecule: metallophosphoesterase mpped2; PDBTitle: rat metallophosphoesterase mpped2 g252h mutant |
| 22 | c1kbpB | | not modelled | 99.9 | 16 | PDB header: hydrolase (phosphoric monoester) Chain: B; PDB Molecule: purple acid phosphatase; PDBTitle: kidney bean purple acid phosphatase |
| 23 | d1s3la | | not modelled | 99.9 | 16 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Yfce-like |
| 24 | c1s3mA | | not modelled | 99.9 | 16 | PDB header: phosphodiesterase Chain: A; PDB Molecule: hypothetical protein mj0936; PDBTitle: structural and functional characterization of a novel2 archaeal phosphodiesterase |
| 25 | c1xzwB | | not modelled | 99.9 | 15 | PDB header: hydrolase Chain: B; PDB Molecule: purple acid phosphatase; PDBTitle: sweet potato purple acid phosphatase/phosphate complex |
| 26 | d2a22a1 | | not modelled | 99.9 | 19 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Yfce-like |
| 27 | d1z2wa1 | | not modelled | 99.9 | 15 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Yfce-like |
| 28 | d1nnwa | | not modelled | 99.8 | 10 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Phosphoesterase-related |
| 29 | c1e11A | | not modelled | 99.8 | 20 | PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein yfce; |

| | | | | | | |
|----|-------------------------|-----------|--------------|------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29 | c1suM | Alignment | not modelled | 99.8 | 20 | PDBTitle: structural and biochemical characterization of yfce, a2 phosphoesterase from e. coli |
| 30 | d1sula | Alignment | not modelled | 99.8 | 20 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Yfce-like |
| 31 | c3rqzC | Alignment | not modelled | 99.8 | 21 | PDB header: hydrolase Chain: C: PDB Molecule: metallophosphoesterase; PDBTitle: crystal structure of metallophosphoesterase from sphaerobacter2 thermophilus |
| 32 | d3ck2a1 | Alignment | not modelled | 99.8 | 19 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Yfce-like |
| 33 | c2kknA | Alignment | not modelled | 99.8 | 21 | PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of themotoga maritima protein tm1076:2 northeast structural genomics consortium target vt57 |
| 34 | d1xm7a | Alignment | not modelled | 99.6 | 16 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Hypothetical protein aq 1666 |
| 35 | d1usha2 | Alignment | not modelled | 99.6 | 10 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain |
| 36 | c1oidA | Alignment | not modelled | 99.6 | 12 | PDB header: hydrolase Chain: A: PDB Molecule: protein usha; PDBTitle: 5'-nucleotidase (e. coli) with an engineered disulfide2 bridge (s228c, p513c) |
| 37 | d2z1aa2 | Alignment | not modelled | 99.4 | 15 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain |
| 38 | c3qfkA | Alignment | not modelled | 99.4 | 14 | PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: 2.05 angstrom crystal structure of putative 5'-nucleotidase from2 staphylococcus aureus in complex with alpha-ketoglutarate |
| 39 | c2z1aA | Alignment | not modelled | 99.3 | 15 | PDB header: hydrolase Chain: A: PDB Molecule: 5'-nucleotidase; PDBTitle: crystal structure of 5'-nucleotidase precursor from thermus2 thermophilus hb8 |
| 40 | c3ivdA | Alignment | not modelled | 99.3 | 15 | PDB header: hydrolase Chain: A: PDB Molecule: nucleotidase; PDBTitle: putative 5'-nucleotidase (c4898) from escherichia coli in2 complex with uridine |
| 41 | d1g5ba | Alignment | not modelled | 99.2 | 14 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 42 | c2wdfA | Alignment | not modelled | 99.1 | 17 | PDB header: hydrolase Chain: A: PDB Molecule: sulfur oxidation protein soxh; PDBTitle: termus thermophilus sulfate thiohydrolase soxh |
| 43 | d1t71a | Alignment | not modelled | 99.1 | 12 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: DR1281-like |
| 44 | c3gveB | Alignment | not modelled | 99.1 | 16 | PDB header: structural genomics, unknown function Chain: B: PDB Molecule: yfkn protein; PDBTitle: crystal structure of calcineurin-like phosphoesterase yfkn from2 bacillus subtilis |
| 45 | c3zu0A | Alignment | not modelled | 99.0 | 15 | PDB header: hydrolase Chain: A: PDB Molecule: nad nucleotidase; PDBTitle: structure of haemophilus influenzae nad nucleotidase (nadn) |
| 46 | d3c9fa2 | Alignment | not modelled | 99.0 | 14 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain |
| 47 | c3jyfB | Alignment | not modelled | 98.9 | 17 | PDB header: hydrolase Chain: B: PDB Molecule: 2',3'-cyclic nucleotide 2'-phosphodiesterase/3'- PDBTitle: the crystal structure of a 2,3-cyclic nucleotide 2'-phosphodiesterase/3'-nucleotidase bifunctional periplasmic precursor3 protein from klebsiella pneumoniae subsp. pneumoniae mgh 78578 |
| 48 | d2z06a1 | Alignment | not modelled | 98.7 | 15 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: TTHA0625-like |
| 49 | c3c9fB | Alignment | not modelled | 98.6 | 13 | PDB header: hydrolase Chain: B: PDB Molecule: 5'-nucleotidase; PDBTitle: crystal structure of 5'-nucleotidase from candida albicans sc5314 |
| 50 | d1t70a | Alignment | not modelled | 98.3 | 14 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: DR1281-like |
| 51 | c2qjcA | Alignment | not modelled | 98.0 | 21 | PDB header: hydrolase Chain: A: PDB Molecule: diadenosine tetraphosphatase, putative; PDBTitle: crystal structure of a putative diadenosine tetraphosphatase |
| 52 | c2dfjA | Alignment | not modelled | 97.4 | 19 | PDB header: hydrolase Chain: A: PDB Molecule: diadenosinetetraphosphatase; PDBTitle: crystal structure of the diadenosine tetraphosphate2 hydrolase from shigella flexneri 2a |
| 53 | c3e0jG | Alignment | not modelled | 97.2 | 20 | PDB header: transferase Chain: G: PDB Molecule: dna polymerase subunit delta-2; PDBTitle: x-ray structure of the complex of regulatory subunits of2 human dna polymerase delta |
| 54 | c2zbmA | Alignment | not modelled | 97.1 | 14 | PDB header: hydrolase Chain: A: PDB Molecule: protein-tyrosine-phosphatase; PDBTitle: crystal structure of i115m mutant cold-active protein2 |

| | | | | | | |
|----|-------------------------|-----------|--------------|------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | | tyrosine phosphatase |
| 55 | d1jk7a_ | Alignment | not modelled | 96.9 | 16 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 56 | d3c5wc1 | Alignment | not modelled | 96.8 | 14 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 57 | d1s70a_ | Alignment | not modelled | 96.6 | 16 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 58 | c2jogA_ | Alignment | not modelled | 96.4 | 14 | PDB header: hydrolase Chain: A: PDB Molecule: calmodulin-dependent calcineurin a subunit alpha PDBTitle: structure of the calcineurin-nfat complex |
| 59 | d1s95a_ | Alignment | not modelled | 96.3 | 16 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 60 | c3icfB_ | Alignment | not modelled | 96.1 | 16 | PDB header: hydrolase Chain: B: PDB Molecule: serine/threonine-protein phosphatase t; PDBTitle: structure of protein serine/threonine phosphatase from saccharomyces2 cerevisiae with similarity to human phosphatase pp5 |
| 61 | c1auia_ | Alignment | not modelled | 95.8 | 14 | PDB header: hydrolase Chain: A: PDB Molecule: serine/threonine phosphatase 2b; PDBTitle: human calcineurin heterodimer |
| 62 | d1auia_ | Alignment | not modelled | 95.8 | 14 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 63 | c2p6bC_ | Alignment | not modelled | 95.6 | 14 | PDB header: hydrolase/hydrolase regulator Chain: C: PDB Molecule: calmodulin-dependent calcineurin a subunit alpha PDBTitle: crystal structure of human calcineurin in complex with2 pviit peptide |
| 64 | d2p6ba1 | Alignment | not modelled | 95.6 | 14 | Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: Protein serine/threonine phosphatase |
| 65 | c1wao4_ | Alignment | not modelled | 94.6 | 14 | PDB header: hydrolase Chain: 4: PDB Molecule: serine/threonine protein phosphatase 5; PDBTitle: pp5 structure |
| 66 | c3floG_ | Alignment | not modelled | 91.5 | 9 | PDB header: transferase Chain: G: PDB Molecule: dna polymerase alpha subunit b; PDBTitle: crystal structure of the carboxyl-terminal domain of yeast2 dna polymerase alpha in complex with its b subunit |
| 67 | c3lmaC_ | Alignment | not modelled | 41.3 | 20 | PDB header: membrane protein Chain: C: PDB Molecule: stage v sporulation protein ad (spovad); PDBTitle: crystal structure of the stage v sporulation protein ad2 (spovad) from bacillus licheniformis. northeast structural3 genomics consortium target bir6. |
| 68 | d1zhxa1 | Alignment | not modelled | 27.6 | 16 | Fold: Oxysterol-binding protein-like Superfamily: Oxysterol-binding protein-like Family: Oxysterol-binding protein |
| 69 | d1gg4a1 | Alignment | not modelled | 20.4 | 16 | Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: MurCDEF C-terminal domain |
| 70 | d1s1da_ | Alignment | not modelled | 17.8 | 40 | Fold: 5-bladed beta-propeller Superfamily: Apyrase Family: Apyrase |
| 71 | c3menC_ | Alignment | not modelled | 14.7 | 16 | PDB header: hydrolase Chain: C: PDB Molecule: acetylpolyamine aminohydrolase; PDBTitle: crystal structure of acetylpolyamine aminohydrolase from burkholderia2 pseudomallei, iodide soak |
| 72 | c3q9cF_ | Alignment | not modelled | 8.6 | 15 | PDB header: hydrolase Chain: F: PDB Molecule: acetylpolyamine amidohydrolase; PDBTitle: crystal structure of h159a apah complexed with n8-acetyl spermidine |
| 73 | c2gx8B_ | Alignment | not modelled | 8.4 | 12 | PDB header: structural genomics, unknown function Chain: B: PDB Molecule: nif3-related protein; PDBTitle: the crystal stucture of bacillus cereus protein related to nif3 |
| 74 | c3ew8A_ | Alignment | not modelled | 7.9 | 8 | PDB header: hydrolase Chain: A: PDB Molecule: histone deacetylase 8; PDBTitle: crystal structure analysis of human hdac8 d101I variant |
| 75 | d1heyA_ | Alignment | not modelled | 7.7 | 10 | Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related |
| 76 | c3ngoA_ | Alignment | not modelled | 7.7 | 11 | PDB header: hydrolase/dna Chain: A: PDB Molecule: ccr4-not transcription complex subunit 6-like; PDBTitle: crystal structure of the human cnot6l nuclease domain in complex with2 poly(a) dna |
| 77 | d2gx8a1 | Alignment | not modelled | 7.1 | 12 | Fold: NIF3 (NGG1p interacting factor 3)-like Superfamily: NIF3 (NGG1p interacting factor 3)-like Family: NIF3 (NGG1p interacting factor 3)-like |
| 78 | c2y1hA_ | Alignment | not modelled | 7.1 | 19 | PDB header: hydrolase Chain: A: PDB Molecule: putative deoxyribonuclease tatdn3; PDBTitle: crystal structure of the human tatd-domain protein 3 (tatdn3) |
| 79 | c3o0dF_ | Alignment | not modelled | 7.0 | 30 | PDB header: hydrolase Chain: F: PDB Molecule: triacylglycerol lipase; PDBTitle: crystal structure of lip2 lipase from yarrowia lipolytica at 1.7 a2 resolution |
| 80 | d1dz3a_ | Alignment | not modelled | 6.7 | 9 | Fold: Flavodoxin-like Superfamily: CheY-like |

| | | | | | |
|----|-------------------------|-----------|--------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | Family: CheY-related |
| 81 | c3h02F_ | Alignment | not modelled | 5.9 | PDB header: lyase Chain: F: PDB Molecule: naphthoate synthase; PDBTitle: 2.15 angstrom resolution crystal structure of naphthoate synthase from2 salmonella typhimurium. |
| 82 | c2nydB_ | Alignment | not modelled | 5.6 | PDB header: unknown function Chain: B: PDB Molecule: upf0135 protein sa1388; PDBTitle: crystal structure of staphylococcus aureus hypothetical protein sa1388 |
| 83 | c3g7nA_ | Alignment | not modelled | 5.4 | PDB header: hydrolase Chain: A: PDB Molecule: lipase; PDBTitle: crystal structure of a triacylglycerol lipase from2 penicillium expansum at 1.3 |
| 84 | d1tiaa_ | Alignment | not modelled | 5.2 | Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases |
| 85 | d3tgla_ | Alignment | not modelled | 5.1 | Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases |
| 86 | c3rsiA_ | Alignment | not modelled | 5.1 | PDB header: isomerase Chain: A: PDB Molecule: putative enoyl-coa hydratase/isomerase; PDBTitle: the structure of a putative enoyl-coa hydratase/isomerase from2 mycobacterium abscessus atcc 19977 / dsm 44196 |