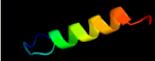
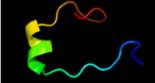
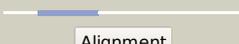
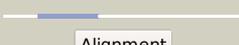
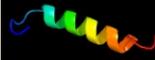
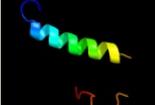


Phyre2

| | |
|---------------|-------------------------------|
| Email | mdejesus@rockefeller.edu |
| Description | RVBD3047c_(-)_3408033_3408317 |
| Date | Thu Aug 8 16:20:22 BST 2019 |
| Unique Job ID | 01dbcf7d812d87b |

Detailed template information

| # | Template | Alignment Coverage | 3D Model | Confidence | % i.d. | Template Information |
|----|-------------------------|---|---|------------|--------|---|
| 1 | d1ub2a2 |  Alignment |  | 36.2 | 33 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 2 | c3mxnB_ |  Alignment |  | 33.8 | 38 | PDB header: replication Chain: B: PDB Molecule: recq-mediated genome instability protein 2; PDBTitle: crystal structure of the rmi core complex |
| 3 | c2l1uA_ |  Alignment |  | 31.8 | 46 | PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase b2, mitochondrial; PDBTitle: structure-functional analysis of mammalian msrb2 protein |
| 4 | d1itka2 |  Alignment |  | 30.2 | 13 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 5 | c2b2qB_ |  Alignment |  | 24.5 | 44 | PDB header: oxidoreductase Chain: B: PDB Molecule: catalase-peroxidase; PDBTitle: crystal structure of native catalase-peroxidase katg at ph7.5 |
| 6 | c2fxhB_ |  Alignment |  | 24.5 | 44 | PDB header: oxidoreductase Chain: B: PDB Molecule: catalase-peroxidase protein; PDBTitle: crystal structure of katg at ph 6.5 |
| 7 | c2k8dA_ |  Alignment |  | 22.9 | 24 | PDB header: oxidoreductase Chain: A: PDB Molecule: peptide methionine sulfoxide reductase msrb; PDBTitle: solution structure of a zinc-binding methionine sulfoxide reductase |
| 8 | c1u2jC_ |  Alignment |  | 21.6 | 29 | PDB header: oxidoreductase Chain: C: PDB Molecule: peroxidase/catalase hpi; PDBTitle: crystal structure of the c-terminal domain from the2 catalase-peroxidase katg of escherichia coli (p21 21 21) |
| 9 | c2kaoA_ |  Alignment |  | 21.3 | 25 | PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase b1; PDBTitle: structure of reduced mouse methionine sulfoxide reductase b12 (sec95cys mutant) |
| 10 | d2ccaa1 |  Alignment |  | 21.0 | 33 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 11 | d1mwva1 |  Alignment |  | 20.6 | 37 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |

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|----|-------------------------|-----------|--------------|------|----|--|
| 12 | c3hcjB_ | Alignment | | 20.1 | 56 | PDB header: oxidoreductase Chain: B: PDB Molecule: peptide methionine sulfoxide reductase; PDBTitle: structure of msrb from xanthomonas campestris (oxidized2 form) |
| 13 | d1l1da_ | Alignment | | 19.8 | 67 | Fold: Mss4-like Superfamily: Mss4-like Family: SelR domain |
| 14 | d1u2ka_ | Alignment | | 19.8 | 29 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 15 | d1mwva2 | Alignment | | 19.4 | 22 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 16 | c3e0mB_ | Alignment | | 18.3 | 56 | PDB header: oxidoreductase Chain: B: PDB Molecule: peptide methionine sulfoxide reductase msra/msrb PDBTitle: crystal structure of fusion protein of msra and msrb |
| 17 | d1xm0a1 | Alignment | | 18.2 | 67 | Fold: Mss4-like Superfamily: Mss4-like Family: SelR domain |
| 18 | d2hiqa1 | Alignment | | 17.7 | 23 | Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Hypothetical protein YdhR |
| 19 | c4j80B_ | Alignment | | 17.2 | 33 | PDB header: chaperone Chain: B: PDB Molecule: chaperone protein dnaj 2; PDBTitle: thermus thermophilus dnaj |
| 20 | c3cezA_ | Alignment | | 16.7 | 56 | PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase; PDBTitle: crystal structure of methionine-r-sulfoxide reductase from2 burkholderia pseudomallei |
| 21 | d1ub2a1 | Alignment | not modelled | 15.8 | 40 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 22 | c1wd6B_ | Alignment | not modelled | 15.0 | 23 | PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein ydhr; PDBTitle: crystal structure of jw1657 from escherichia coli |
| 23 | d1itka1 | Alignment | not modelled | 14.7 | 30 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG |
| 24 | c3ut2B_ | Alignment | not modelled | 14.3 | 30 | PDB header: oxidoreductase Chain: B: PDB Molecule: catalase-peroxidase 2; PDBTitle: crystal structure of fungal magkatg2 |
| 25 | d1gwya_ | Alignment | not modelled | 14.0 | 25 | Fold: Cytolysin/lectin Superfamily: Cytolysin/lectin Family: Anemone pore-forming cytolysin |
| 26 | c1itkB_ | Alignment | not modelled | 12.6 | 17 | PDB header: oxidoreductase Chain: B: PDB Molecule: catalase-peroxidase; PDBTitle: crystal structure of catalase-peroxidase from haloarcula2 marismortui |
| 27 | c2ccaA_ | Alignment | not modelled | 12.5 | 26 | PDB header: oxidoreductase Chain: A: PDB Molecule: peroxidase/catalase t; PDBTitle: crystal structure of the catalase-peroxidase (katg) and2 s315t mutant from mycobacterium tuberculosis |
| 28 | c5fa9B_ | Alignment | not modelled | 12.4 | 56 | PDB header: oxidoreductase Chain: B: PDB Molecule: peptide methionine sulfoxide reductase msra; PDBTitle: bifunctional methionine sulfoxide reductase ab (msrab) from treponema2 denticola |

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|----|-------------------------|-----------|--------------|------|----|--|
| 29 | d1lxja_ | Alignment | not modelled | 12.4 | 14 | Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: MTH1187-like |
| 30 | c3vImB_ | Alignment | not modelled | 11.4 | 30 | PDB header: oxidoreductase Chain: B: PDB Molecule: catalase-peroxidase 2; PDBTitle: crystal structure analysis of the met244ala variant of katg from <i>Halorubrum marismortui</i> |
| 31 | d1llpa_ | Alignment | not modelled | 10.9 | 24 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like |
| 32 | d1atxa_ | Alignment | not modelled | 10.3 | 86 | Fold: Defensin-like Superfamily: Defensin-like Family: Defensin |
| 33 | d1iyna_ | Alignment | not modelled | 10.1 | 48 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like |
| 34 | c1ub2A_ | Alignment | not modelled | 9.1 | 39 | PDB header: oxidoreductase Chain: A: PDB Molecule: catalase-peroxidase; PDBTitle: crystal structure of catalase-peroxidase from <i>Synechococcus pcc 7942</i> |
| 35 | d1gmnbl | Alignment | not modelled | 9.0 | 46 | Fold: Hairpin loop containing domain-like Superfamily: Hairpin loop containing domain-like Family: Hairpin loop containing domain |
| 36 | d1iaza_ | Alignment | not modelled | 8.9 | 28 | Fold: Cytolysin/lectin Superfamily: Cytolysin/lectin Family: Anemone pore-forming cytolysin |
| 37 | d2e39a1 | Alignment | not modelled | 8.7 | 20 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like |
| 38 | d1d0da_ | Alignment | not modelled | 7.6 | 67 | Fold: BPTI-like Superfamily: BPTI-like Family: Soft tick anticoagulant proteins |
| 39 | c6rdu9_ | Alignment | not modelled | 7.5 | 67 | PDB header: proton transport Chain: 9: PDB Molecule: asa-9: polytomella f-atp synthase associated subunit 9; PDBTitle: cryo-em structure of polytomella f-atp synthase, rotary substate 1e,2 monomer-masked refinement |
| 40 | d1vk8a_ | Alignment | not modelled | 7.5 | 19 | Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: MTH1187-like |
| 41 | c5whqA_ | Alignment | not modelled | 7.3 | 30 | PDB header: oxidoreductase Chain: A: PDB Molecule: catalase-peroxidase; PDBTitle: crystal structure of the catalase-peroxidase from <i>Neurospora crassa</i> at 2.9 Å |
| 42 | c2xdgB_ | Alignment | not modelled | 7.2 | 29 | PDB header: signaling protein Chain: B: PDB Molecule: growth hormone-releasing hormone receptor; PDBTitle: crystal structure of the extracellular domain of human growth hormone2 releasing hormone receptor. |
| 43 | d1b80a_ | Alignment | not modelled | 7.2 | 24 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like |
| 44 | d2gtad1 | Alignment | not modelled | 6.9 | 16 | Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like |
| 45 | c1tapA_ | Alignment | not modelled | 6.7 | 67 | PDB header: proteinase inhibitor Chain: A: PDB Molecule: factor xa inhibitor; PDBTitle: nmr solution structure of recombinant tick anticoagulant2 protein (rtap), a factor xa inhibitor from the tick <i>Ornithodoros moubata</i> |
| 46 | d1ujoa_ | Alignment | not modelled | 6.6 | 21 | Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain |
| 47 | d1nqka_ | Alignment | not modelled | 6.3 | 20 | Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Ssd-like monooxygenases |
| 48 | c4h3zA_ | Alignment | not modelled | 6.2 | 33 | PDB header: transferase Chain: A: PDB Molecule: trna (guanine-n(1)-)-methyltransferase; PDBTitle: crystal structure of a symmetric dimer of a trna (guanine-n(1)-)-2 methyltransferase from <i>Burkholderia phymatum</i> bound to s-adenosyl3 homocystein in both half-sites |
| 49 | c2w23A_ | Alignment | not modelled | 6.1 | 15 | PDB header: oxidoreductase Chain: A: PDB Molecule: versatile peroxidase vpl2; PDBTitle: structure of mutant w169y of <i>Pleurotus eryngii</i> versatile2 peroxidase (vp) |
| 50 | c5wyrA_ | Alignment | not modelled | 6.1 | 47 | PDB header: transferase Chain: A: PDB Molecule: trna (guanine-n(1)-)-methyltransferase; PDBTitle: crystal structure and catalytic mechanism of the essential m1g37 trna2 methyltransferase trmd from <i>Pseudomonas aeruginosa</i> |
| 51 | c2q9lA_ | Alignment | not modelled | 5.9 | 23 | PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of imazg from <i>Vibrio dat 722</i> : ctag-imazg (p43212) |
| 52 | c6gboG_ | Alignment | not modelled | 5.9 | 30 | PDB header: viral protein Chain: G: PDB Molecule: polymerase cofactor vp35; PDBTitle: crystal structure of the oligomerization domain of vp35 from ebola2 virus |
| 53 | d1qpaa_ | Alignment | not modelled | 5.6 | 16 | Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like |
| 54 | c1apfA_ | Alianment | not modelled | 5.3 | 56 | PDB header: cardiac stimulant Chain: A: PDB Molecule: anthopleurin-b; |

