
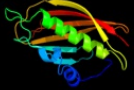


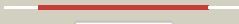

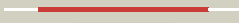


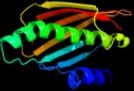





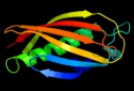

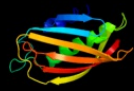















| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information   |
|----|-------------------------|---|---|------------|--------|--|
| 1  | <a href="#">d1vh9a_</a> |  Alignment   |    | 100.0      | 99     | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 2  | <a href="#">d1vh5a_</a> |  Alignment   |    | 100.0      | 59     | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 3  | <a href="#">d1sc0a_</a> |  Alignment   |    | 100.0      | 48     | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 4  | <a href="#">c2qwzB_</a> |  Alignment   |    | 100.0      | 19     | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> phenylacetic acid degradation-related protein;<br><b>PDBTitle:</b> crystal structure of a putative thioesterase (tm1040_1390) from <i>Mycobacterium smegmatis</i> sp. tm1040 at 2.15 Å resolution  |
| 5  | <a href="#">c3hduB_</a> |  Alignment |  | 100.0      | 10     | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative thioesterase;<br><b>PDBTitle:</b> crystal structure of a putative thioesterase (syn_01977) from <i>Syntrophus aciditrophicus</i> sb at 2.50 Å resolution  |
| 6  | <a href="#">d1q4ua_</a> |  Alignment |  | 100.0      | 31     | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 7  | <a href="#">c3e8pA_</a> |  Alignment |  | 100.0      | 17     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of the protein q8e9m7 from <i>Shewanella oneidensis</i> related to thioesterase superfamily, northeast3 structural genomics consortium target sor246. |
| 8  | <a href="#">c3s4kA_</a> |  Alignment |  | 100.0      | 33     | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative esterase rv1847/mt1895;<br><b>PDBTitle:</b> structure of a putative esterase rv1847/mt1895 from <i>Mycobacterium tuberculosis</i>   |
| 9  | <a href="#">c3e1eE_</a> |  Alignment |  | 99.9       | 20     | <b>PDB header:</b> hydrolase<br><b>Chain:</b> E: <b>PDB Molecule:</b> thioesterase family protein;<br><b>PDBTitle:</b> crystal structure of a thioesterase family protein from <i>Mycobacterium pomeroyi</i> , northeast structural genomics3 target sir180a   |
| 10 | <a href="#">c2pimA_</a> |  Alignment |  | 99.9       | 20     | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> phenylacetic acid degradation-related protein;<br><b>PDBTitle:</b> crystal structure of a putative thioesterase, phenylacetic acid2 degradation-related protein (reut_b4779) from <i>Ralstonia eutropha</i> 3 jmp134 at 2.20 Å resolution        |
| 11 | <a href="#">d1zkia1</a> |  Alignment |  | 99.9       | 25     | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |

|    |                         |           |   |      |    |  |
|----|-------------------------|-----------|---|------|----|--|
| 12 | <a href="#">d2f0xa1</a> | Alignment |     | 99.9 | 20 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 13 | <a href="#">c3f1tB</a>  | Alignment |    | 99.9 | 15 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein q9i3c8_pseae;<br><b>PDBTitle:</b> crystal structure of the q9i3c8_pseae protein from pseudomonas2 aeruginosa. northeast structural genomics consortium target par319a. |
| 14 | <a href="#">c3e29C</a>  | Alignment |    | 99.9 | 20 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> C: <b>PDB Molecule:</b> uncharacterized protein q7we92_borbr;<br><b>PDBTitle:</b> x-ray structure of the protein q7we92_borbr from thioesterase2 superfamily. northeast structural genomics consortium target bor214a. |
| 15 | <a href="#">d2fs2a1</a> | Alignment |    | 99.9 | 20 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 16 | <a href="#">c3dkzA</a>  | Alignment |    | 99.9 | 17 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> thioesterase superfamily protein;<br><b>PDBTitle:</b> crystal structure of the q7w9w5_borpa protein from2 bordetella parapertussis. northeast structural genomics3 consortium target bpr208c.                              |
| 17 | <a href="#">c3gekA</a>  | Alignment |   | 99.9 | 27 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative thioesterase yhda;<br><b>PDBTitle:</b> crystal structure of putative thioesterase yhda from lactococcus2 lactis. northeast structural genomics consortium target kr113                |
| 18 | <a href="#">d2h4ua1</a> | Alignment |  | 99.9 | 22 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 19 | <a href="#">d1sh8a</a>  | Alignment |  | 99.9 | 19 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 20 | <a href="#">c3nwzD</a>  | Alignment |  | 99.9 | 27 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> D: <b>PDB Molecule:</b> bh2602 protein;<br><b>PDBTitle:</b> crystal structure of bh2602 protein from bacillus halodurans with coa,2 northeast structural genomics consortium target bhr199                             |
| 21 | <a href="#">c3lbeA</a>  | Alignment | not modelled  | 99.9 | 13 | <b>PDB header:</b> unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein smu.793;<br><b>PDBTitle:</b> the crystal structure of smu.793 from streptococcus mutans ua159 bound2 to acetyl coa   |
| 22 | <a href="#">d1wlua1</a> | Alignment | not modelled  | 99.9 | 20 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 23 | <a href="#">d2cy9a1</a> | Alignment | not modelled  | 99.9 | 17 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 24 | <a href="#">d1yoca1</a> | Alignment | not modelled  | 99.9 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 25 | <a href="#">c3lwgB</a>  | Alignment | not modelled  | 99.9 | 8  | <b>PDB header:</b> unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> hp0420 homologue;<br><b>PDBTitle:</b> crystal structure of hp0420-homologue c46a from helicobacter2 felis   |
| 26 | <a href="#">d2hboa1</a> | Alignment | not modelled  | 99.9 | 14 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 27 | <a href="#">d1ixla</a>  | Alignment | not modelled  | 99.9 | 19 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 28 | <a href="#">d1t82a</a>  | Alignment | not modelled  | 99.9 | 15 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
|    |                         |           |   |      |    | <b>PDB header:</b> structural genomics, unknown function   |

|    |                         |           |              |      |    |  |
|----|-------------------------|-----------|--------------|------|----|--|
| 29 | <a href="#">c3lmbA_</a> | Alignment | not modelled | 99.9 | 20 | <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> the crystal structure of the protein olei01261 with unknown function2 from chlorobaculum tepidum t1s  |
| 30 | <a href="#">c3bnvD_</a> | Alignment | not modelled | 99.9 | 7  | <b>PDB header:</b> unknown function<br><b>Chain:</b> D: <b>PDB Molecule:</b> cj0977;<br><b>PDBTitle:</b> crystal structure of cj0977, a sigma28-regulated virulence protein2 from campylobacter jejuni.  |
| 31 | <a href="#">d2f41a1</a> | Alignment | not modelled | 99.8 | 12 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 32 | <a href="#">d2ov9a1</a> | Alignment | not modelled | 99.8 | 17 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Paal/Ydil-like   |
| 33 | <a href="#">c2prxB_</a> | Alignment | not modelled | 99.8 | 15 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> thioesterase superfamily protein;<br><b>PDBTitle:</b> crystal structure of thioesterase superfamily protein (zp_00837258.1)2 from shewanella loihica pv-4 at 1.65 a resolution                         |
| 34 | <a href="#">c2f3xA_</a> | Alignment | not modelled | 99.8 | 13 | <b>PDB header:</b> gene regulation<br><b>Chain:</b> A: <b>PDB Molecule:</b> transcription factor fapr;<br><b>PDBTitle:</b> crystal structure of fapr (in complex with effector)- a2 global regulator of fatty acid biosynthesis in b. subtilis                               |
| 35 | <a href="#">c2eisA_</a> | Alignment | not modelled | 99.7 | 20 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein thb207;<br><b>PDBTitle:</b> x-ray structure of acyl-coa hydrolase-like protein, tt1379, from2 thermus thermophilus hb8                                |
| 36 | <a href="#">d1ylia1</a> | Alignment | not modelled | 99.7 | 17 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 37 | <a href="#">c3d6lA_</a> | Alignment | not modelled | 99.7 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative hydrolase;<br><b>PDBTitle:</b> crystal structure of cj0915, a hexameric hotdog fold2 thioesterase of campylobacter jejuni   |
| 38 | <a href="#">d2gvha2</a> | Alignment | not modelled | 99.6 | 14 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 39 | <a href="#">c3b7kA_</a> | Alignment | not modelled | 99.6 | 8  | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> acyl-coenzyme a thioesterase 12;<br><b>PDBTitle:</b> human acyl-coenzyme a thioesterase 12   |
| 40 | <a href="#">c2gvhC_</a> | Alignment | not modelled | 99.6 | 17 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> agr_1_2016p;<br><b>PDBTitle:</b> crystal structure of acyl-coa hydrolase (15159470) from agrobacterium2 tumefaciens at 2.65 a resolution   |
| 41 | <a href="#">c2qq2C_</a> | Alignment | not modelled | 99.6 | 11 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> cytosolic acyl coenzyme a thioester hydrolase;<br><b>PDBTitle:</b> crystal structure of c-terminal domain of human acyl-coa thioesterase2 7  |
| 42 | <a href="#">d1vpma_</a> | Alignment | not modelled | 99.5 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 43 | <a href="#">d2gvha1</a> | Alignment | not modelled | 99.5 | 18 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 44 | <a href="#">d1y7ua1</a> | Alignment | not modelled | 99.5 | 16 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 45 | <a href="#">c2v1oF_</a> | Alignment | not modelled | 99.4 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> F: <b>PDB Molecule:</b> cytosolic acyl coenzyme a thioester hydrolase;<br><b>PDBTitle:</b> crystal structure of n-terminal domain of acyl-coa2 thioesterase 7  |
| 46 | <a href="#">d2cwza1</a> | Alignment | not modelled | 99.2 | 19 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> TTHA0967-like  |
| 47 | <a href="#">c3qooA_</a> | Alignment | not modelled | 98.5 | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of hot-dog-like taci_0573 protein from2 thermanaerovibrio acidaminovorans                                   |
| 48 | <a href="#">c3bbjA_</a> | Alignment | not modelled | 98.5 | 21 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative thioesterase ii;<br><b>PDBTitle:</b> crystal structure of a putative thioesterase ii (tfu_2367) from2 thermobifida fusca yx at 2.45 a resolution  |
| 49 | <a href="#">c3kuvB_</a> | Alignment | not modelled | 98.4 | 19 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> fluoroacetyl coenzyme a thioesterase;<br><b>PDBTitle:</b> structural basis of the activity and substrate specificity of the2 fluoroacetyl-coa thioesterase flk - t42s mutant in complex with3 acetate. |
| 50 | <a href="#">d1s5ua_</a> | Alignment | not modelled | 98.4 | 6  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 51 | <a href="#">c3rqbB_</a> | Alignment | not modelled | 98.4 | 14 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of conserved protein of unknown function with hot2 dog fold from alicyclobacillus acidocaldarius            |
| 52 | <a href="#">d2cyea1</a> | Alignment | not modelled | 98.4 | 17 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 53 | <a href="#">d2hlja1</a> | Alignment | not modelled | 98.3 | 12 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like  |
| 54 | <a href="#">c3hm0C_</a> | Alignment | not modelled | 98.3 | 11 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> probable thioesterase;<br><b>PDBTitle:</b> crystal structure of probable thioesterase from bartonella2 henselae<br><b>PDB header:</b> hydrolase  |

|    |                         |           |              |      |    |   |
|----|-------------------------|-----------|--------------|------|----|---|
| 55 | <a href="#">c2w3xE_</a> | Alignment | not modelled | 98.3 | 8  | <b>Chain:</b> E: <b>PDB Molecule:</b> cale7;<br><b>PDBTitle:</b> crystal structure of a bifunctional hotdog fold2 thioesterase in enediynes biosynthesis, cale7   |
| 56 | <a href="#">d1njka_</a> | Alignment | not modelled | 98.3 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 57 | <a href="#">d2q78a1</a> | Alignment | not modelled | 98.3 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> TTHA0967-like   |
| 58 | <a href="#">d1c8ua1</a> | Alignment | not modelled | 98.3 | 9  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-CoA thioesterase   |
| 59 | <a href="#">c3ck1B_</a> | Alignment | not modelled | 98.2 | 9  | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative thioesterase;<br><b>PDBTitle:</b> crystal structure of a putative thioesterase (reut_a2179) from2 ralstonia eutropha jmp134 at 1.74 a resolution                                     |
| 60 | <a href="#">c2essA_</a> | Alignment | not modelled | 98.2 | 13 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> acyl-acp thioesterase;<br><b>PDBTitle:</b> crystal structure of an acyl-acp thioesterase (np_810988.1) from2 bacteroides thetaiotaomicron vpi-5482 at 1.90 a resolution                       |
| 61 | <a href="#">c3rd7A_</a> | Alignment | not modelled | 98.2 | 19 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> acyl-coa thioesterase;<br><b>PDBTitle:</b> crystal structure of acyl-coa thioesterase from mycobacterium avium  |
| 62 | <a href="#">c1c8uA_</a> | Alignment | not modelled | 98.2 | 8  | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> acyl-coa thioesterase ii;<br><b>PDBTitle:</b> crystal structure of the e.coli thioesterase ii, a2 homologue of the human nef-binding enzyme   |
| 63 | <a href="#">d2essa1</a> | Alignment | not modelled | 98.2 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-ACP thioesterase-like  |
| 64 | <a href="#">d2gf6a1</a> | Alignment | not modelled | 98.2 | 19 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 65 | <a href="#">c2egiE_</a> | Alignment | not modelled | 98.1 | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> E: <b>PDB Molecule:</b> hypothetical protein aq_1494;<br><b>PDBTitle:</b> crystal structure of a hypothetical protein(aq1494) from aquifex2 aeolicus                                      |
| 66 | <a href="#">d2o5ua1</a> | Alignment | not modelled | 98.1 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 67 | <a href="#">d2fuja1</a> | Alignment | not modelled | 98.1 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 68 | <a href="#">d1lo7a_</a> | Alignment | not modelled | 98.1 | 7  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 69 | <a href="#">c2pzhC_</a> | Alignment | not modelled | 98.1 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> hypothetical protein hp_0496;<br><b>PDBTitle:</b> ybgc thioesterase (hp0496) from helicobacter pylori   |
| 70 | <a href="#">d2nuja1</a> | Alignment | not modelled | 98.1 | 12 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 71 | <a href="#">d2owna1</a> | Alignment | not modelled | 98.1 | 10 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-ACP thioesterase-like  |
| 72 | <a href="#">d2hx5a1</a> | Alignment | not modelled | 98.0 | 9  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 73 | <a href="#">c3d6xA_</a> | Alignment | not modelled | 98.0 | 12 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> (3r)-hydroxymyristoyl-[acyl-carrier-protein] dehydratase;<br><b>PDBTitle:</b> crystal structure of campylobacter jejuni fabz  |
| 74 | <a href="#">d2oafa1</a> | Alignment | not modelled | 98.0 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 75 | <a href="#">d1z54a1</a> | Alignment | not modelled | 97.9 | 15 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 76 | <a href="#">c2ownA_</a> | Alignment | not modelled | 97.9 | 10 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative oleoyl-[acyl-carrier protein] thioesterase;<br><b>PDBTitle:</b> crystal structure of oleoyl thioesterase (putative) (np_784467.1) from2 lactobacillus plantarum at 2.00 a resolution |
| 77 | <a href="#">c2xf1B_</a> | Alignment | not modelled | 97.8 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> dyne7;<br><b>PDBTitle:</b> induced-fit and allosteric effects upon polyene binding2 revealed by crystal structures of the dynemicin3 thioesterase   |
| 78 | <a href="#">d1tbua1</a> | Alignment | not modelled | 97.8 | 16 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-CoA thioesterase   |
| 79 | <a href="#">c3c3yA_</a> | Alignment | not modelled | 97.8 | 13 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative thioesterase;<br><b>PDBTitle:</b> crystal structure of putative thioesterase (yp_496845.1) from2 novosphingobium aromaticivorans dsm 12444 at 1.70 a resolution                      |
| 80 | <a href="#">d2oiwa1</a> | Alignment | not modelled | 97.8 | 10 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 81 | <a href="#">c2g1vA_</a> | Alignment | not modelled | 97.8 | 11 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> (3r)-hydroxymyristoyl-acyl carrier protein  |

|     |                         |           |              |      |    |   |
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| 81  | <a href="#">c2giva</a>  | Alignment | not modelled | 97.8 | 11 | <b>PDBTitle:</b> crystal structure of (3r)-hydroxyacyl-acyl carrier protein2 dehydratase(fabz) mutant(y100a) from helicobacter pylori   |
| 82  | <a href="#">d2alia1</a> | Alignment | not modelled | 97.8 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> 4HBT-like   |
| 83  | <a href="#">c2alia</a>  | Alignment | not modelled | 97.8 | 13 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein pa2801;<br><b>PDBTitle:</b> structure of protein of unknown function pa2801 from pseudomonas2 aeruginosa, putative thioesterase  |
| 84  | <a href="#">c3ir3B</a>  | Alignment | not modelled | 97.6 | 18 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> 3-hydroxyacyl-thioester dehydratase 2;<br><b>PDBTitle:</b> crystal structure of human 3-hydroxyacyl-thioester dehydratase 22 (htd2)   |
| 85  | <a href="#">c3exzA</a>  | Alignment | not modelled | 97.5 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> maoc-like dehydratase;<br><b>PDBTitle:</b> crystal structure of the maoc-like dehydratase from rhodospirillum2 rubrum. northeast structural genomics consortium target rrr103a.   |
| 86  | <a href="#">d1q6wa</a>  | Alignment | not modelled | 97.4 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 87  | <a href="#">d1iq6a</a>  | Alignment | not modelled | 97.3 | 18 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 88  | <a href="#">d2owna2</a> | Alignment | not modelled | 97.3 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-ACP thioesterase-like  |
| 89  | <a href="#">d1c8ua2</a> | Alignment | not modelled | 97.3 | 8  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-CoA thioesterase   |
| 90  | <a href="#">d1mkaa</a>  | Alignment | not modelled | 97.1 | 15 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> beta-Hydroxydecanol thiol ester dehydrase   |
| 91  | <a href="#">d1z6ba1</a> | Alignment | not modelled | 96.5 | 9  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> FabZ-like   |
| 92  | <a href="#">d1ulza</a>  | Alignment | not modelled | 96.0 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> FabZ-like   |
| 93  | <a href="#">d2bi0a1</a> | Alignment | not modelled | 95.9 | 13 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 94  | <a href="#">c2bi0A</a>  | Alignment | not modelled | 95.2 | 13 | <b>PDB header:</b> hypothetical protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein rv0216;<br><b>PDBTitle:</b> rv0216, a conserved hypothetical protein from mycobacterium2 tuberculosis that is essential for bacterial survival3 during infection, has a double hotdogfold |
| 95  | <a href="#">d2b3na1</a> | Alignment | not modelled | 95.2 | 17 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 96  | <a href="#">d1pn2a1</a> | Alignment | not modelled | 93.1 | 11 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 97  | <a href="#">d1s9ca2</a> | Alignment | not modelled | 92.6 | 12 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 98  | <a href="#">c3kg8A</a>  | Alignment | not modelled | 91.9 | 12 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> curj;<br><b>PDBTitle:</b> dehydratase domain from curj module of curacin polyketide synthase  |
| 99  | <a href="#">d2essa2</a> | Alignment | not modelled | 91.4 | 7  | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> Acyl-ACP thioesterase-like  |
| 100 | <a href="#">c3khpB</a>  | Alignment | not modelled | 91.3 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> maoc family protein;<br><b>PDBTitle:</b> crystal structure of a possible dehydrogenase from2 mycobacterium tuberculosis at 2.3a resolution   |
| 101 | <a href="#">c2cf2L</a>  | Alignment | not modelled | 85.0 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> L: <b>PDB Molecule:</b> fatty acid synthase, dh domain;<br><b>PDBTitle:</b> architecture of mammalian fatty acid synthase   |
| 102 | <a href="#">d2bi0a2</a> | Alignment | not modelled | 76.9 | 21 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 103 | <a href="#">c3kg6C</a>  | Alignment | not modelled | 72.6 | 18 | <b>PDB header:</b> lyase<br><b>Chain:</b> C: <b>PDB Molecule:</b> curf;<br><b>PDBTitle:</b> dehydratase domain from curf module of curacin polyketide synthase  |
| 104 | <a href="#">c3omlA</a>  | Alignment | not modelled | 72.4 | 15 | <b>PDB header:</b> oxidoreductase, hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> peroxisomal multifunctional enzyme type 2, cg3415;<br><b>PDBTitle:</b> structure of full-length peroxisomal multifunctional enzyme type 22 from drosophila melanogaster                                   |
| 105 | <a href="#">c3kh8B</a>  | Alignment | not modelled | 69.8 | 19 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> maoc-like dehydratase;<br><b>PDBTitle:</b> crystal structure of maoc-like dehydratase from phytophthora capsici   |
| 106 | <a href="#">c1pn2D</a>  | Alignment | not modelled | 67.5 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> D: <b>PDB Molecule:</b> peroxisomal hydratase-dehydrogenase-epimerase;<br><b>PDBTitle:</b> crystal structure analysis of the selenomethionine labelled2 2-enoyl-coa hydratase 2 domain of candida tropicalis3 multifunctional enzyme type 2           |
|     |                         |           |              |      |    | <b>PDB header:</b> structural genomics, unknown function  |

|     |                         |           |              |      |    |   |
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| 107 | <a href="#">c3esiD_</a> | Alignment | not modelled | 67.0 | 13 | <b>Chain:</b> D: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of an uncharacterized protein from2 erwinia carotovora subsp. atroseptica. northeast3 structural genomics target ewr179                          |
| 108 | <a href="#">c3kg7C_</a> | Alignment | not modelled | 65.1 | 13 | <b>PDB header:</b> lyase<br><b>Chain:</b> C: <b>PDB Molecule:</b> curh;<br><b>PDBTitle:</b> dehydratase domain from curh module of curacin polyketide synthase  |
| 109 | <a href="#">c2cdhT_</a> | Alignment | not modelled | 61.7 | 16 | <b>PDB header:</b> transferase<br><b>Chain:</b> T: <b>PDB Molecule:</b> dehydratase;<br><b>PDBTitle:</b> architecture of the thermomyces lanuginosus fungal fatty2 acid synthase at 5 angstrom resolution.  |
| 110 | <a href="#">d1pn2a2</a> | Alignment | not modelled | 58.8 | 16 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 111 | <a href="#">c3kg9A_</a> | Alignment | not modelled | 58.6 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> curk;<br><b>PDBTitle:</b> dehydratase domain from curk module of curacin polyketide synthase  |
| 112 | <a href="#">d2c2ia1</a> | Alignment | not modelled | 54.1 | 17 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |
| 113 | <a href="#">d2hq2a1</a> | Alignment | not modelled | 45.9 | 7  | <b>Fold:</b> Heme iron utilization protein-like<br><b>Superfamily:</b> Heme iron utilization protein-like<br><b>Family:</b> HemS/ChuS-like  |
| 114 | <a href="#">c3el6A_</a> | Alignment | not modelled | 43.5 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> erythromycin dehydratase;<br><b>PDBTitle:</b> crystal structure of the erythromycin dehydratase   |
| 115 | <a href="#">c1s9cK_</a> | Alignment | not modelled | 41.7 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> K: <b>PDB Molecule:</b> peroxisomal multifunctional enzyme type 2;<br><b>PDBTitle:</b> crystal structure analysis of the 2-enoyl-coa hydratase 22 domain of human peroxisomal multifunctional enzyme type 2 |
| 116 | <a href="#">d2j0pa1</a> | Alignment | not modelled | 34.4 | 6  | <b>Fold:</b> Heme iron utilization protein-like<br><b>Superfamily:</b> Heme iron utilization protein-like<br><b>Family:</b> HemS/ChuS-like  |
| 117 | <a href="#">d1s9ca1</a> | Alignment | not modelled | 27.7 | 16 | <b>Fold:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Superfamily:</b> Thioesterase/thiol ester dehydrase-isomerase<br><b>Family:</b> MaoC-like   |