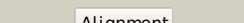
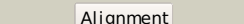
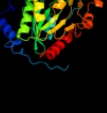
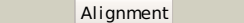
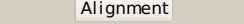
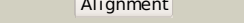
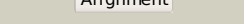
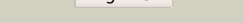


| #  | Template                | Alignment Coverage                                                                               | 3D Model                                                                            | Confidence | % i.d. | Template Information                                                                                                                                                                                                                                                                                      |
|----|-------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | <a href="#">c2f9ya1</a> | <br>Alignment   |    | 100.0      | 99     | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                                                                               |
| 2  | <a href="#">c2f9iC_</a> | <br>Alignment   |    | 100.0      | 54     | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> acetyl-coenzyme a carboxylase carboxyl<br><b>PDBTitle:</b> crystal structure of the carboxyltransferase subunit of acc2 from staphylococcus aureus                                                                                |
| 3  | <a href="#">c3glmD_</a> | <br>Alignment   |    | 100.0      | 15     | <b>PDB header:</b> lyase<br><b>Chain:</b> D: <b>PDB Molecule:</b> glutaconyl-coa decarboxylase subunit a;<br><b>PDBTitle:</b> glutaconyl-coa decarboxylase a subunit from clostridium2 symbiosum co-crystallized with crotonyl-coa                                                                        |
| 4  | <a href="#">c1on3E_</a> | <br>Alignment   |   | 100.0      | 22     | <b>PDB header:</b> transferase<br><b>Chain:</b> E: <b>PDB Molecule:</b> methylmalonyl-coa carboxyltransferase 12s<br><b>PDBTitle:</b> transcarboxylase 12s crystal structure: hexamer assembly2 and substrate binding to a multienzyme core (with3 methylmalonyl-coenzyme a and methylmalonic acid bound) |
| 5  | <a href="#">c1x0uB_</a> | <br>Alignment |  | 100.0      | 23     | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> hypothetical methylmalonyl-coa decarboxylase alpha subunit;<br><b>PDBTitle:</b> crystal structure of the carboxyl transferase subunit of putative pcc2 of sulfolobus tokodaii                                                           |
| 6  | <a href="#">c2a7sD_</a> | <br>Alignment |  | 100.0      | 21     | <b>PDB header:</b> ligase<br><b>Chain:</b> D: <b>PDB Molecule:</b> probable propionyl-coa carboxylase beta chain 5;<br><b>PDBTitle:</b> crystal structure of the acyl-coa carboxylase, accd5, from2 mycobacterium tuberculosis                                                                            |
| 7  | <a href="#">c1vrgE_</a> | <br>Alignment |  | 100.0      | 22     | <b>PDB header:</b> ligase<br><b>Chain:</b> E: <b>PDB Molecule:</b> propionyl-coa carboxylase, beta subunit;<br><b>PDBTitle:</b> crystal structure of propionyl-coa carboxylase, beta subunit (tm0716)2 from thermotoga maritima at 2.30 a resolution                                                      |
| 8  | <a href="#">c3n6rF_</a> | <br>Alignment |  | 100.0      | 20     | <b>PDB header:</b> ligase<br><b>Chain:</b> F: <b>PDB Molecule:</b> propionyl-coa carboxylase, beta subunit;<br><b>PDBTitle:</b> crystal structure of the holoenzyme of propionyl-coa carboxylase (pcc)                                                                                                    |
| 9  | <a href="#">d1pixa3</a> | <br>Alignment |  | 100.0      | 16     | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                                                                               |
| 10 | <a href="#">c3u9rB_</a> | <br>Alignment |  | 100.0      | 17     | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> methylcrotonyl-coa carboxylase, beta-subunit;<br><b>PDBTitle:</b> crystal structure of p. aeruginosa 3-methylcrotonyl-coa carboxylase2 (mcc), beta subunit                                                                             |
| 11 | <a href="#">c1xnwD_</a> | <br>Alignment |  | 100.0      | 21     | <b>PDB header:</b> ligase<br><b>Chain:</b> D: <b>PDB Molecule:</b> propionyl-coa carboxylase complex b subunit;<br><b>PDBTitle:</b> acyl-coa carboxylase beta subunit from s. coelicolor (pccb), 2 apo form #2, mutant d422i                                                                              |

|    |                         |           |              |       |    |                                                                                                                                                                                                                                                   |
|----|-------------------------|-----------|--------------|-------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | <a href="#">c1pixB_</a> | Alignment |              | 100.0 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> glutaconyl-coa decarboxylase a subunit;<br><b>PDBTitle:</b> crystal structure of the carboxyltransferase subunit of the2 bacterial ion pump glutaconyl-coenzyme a decarboxylase |
| 13 | <a href="#">d2a7sa2</a> | Alignment |              | 100.0 | 25 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 14 | <a href="#">d1on3a2</a> | Alignment |              | 100.0 | 24 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 15 | <a href="#">d1xnya2</a> | Alignment |              | 100.0 | 22 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 16 | <a href="#">d1vrqa2</a> | Alignment |              | 100.0 | 26 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 17 | <a href="#">d1pixa2</a> | Alignment |              | 100.0 | 15 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 18 | <a href="#">d1on3a1</a> | Alignment |              | 100.0 | 19 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 19 | <a href="#">d1vrqa1</a> | Alignment |              | 100.0 | 14 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 20 | <a href="#">d1xnya1</a> | Alignment |              | 100.0 | 20 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 21 | <a href="#">d2a7sa1</a> | Alignment | not modelled | 100.0 | 19 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 22 | <a href="#">c2f9yB_</a> | Alignment | not modelled | 100.0 | 20 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> acetyl-coenzyme a carboxylase carboxyl transferase subunit<br><b>PDBTitle:</b> the crystal structure of the carboxyltransferase subunit of acc from2 escherichia coli          |
| 23 | <a href="#">d2f9yb1</a> | Alignment | not modelled | 100.0 | 20 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                       |
| 24 | <a href="#">c2f9iD_</a> | Alignment | not modelled | 100.0 | 20 | <b>PDB header:</b> transferase<br><b>Chain:</b> D: <b>PDB Molecule:</b> acetyl-coenzyme a carboxylase carboxyl<br><b>PDBTitle:</b> crystal structure of the carboxyltransferase subunit of acc2 from staphylococcus aureus                        |
| 25 | <a href="#">c2x24B_</a> | Alignment | not modelled | 100.0 | 18 | <b>PDB header:</b> ligase<br><b>Chain:</b> B: <b>PDB Molecule:</b> acetyl-coa carboxylase;<br><b>PDBTitle:</b> bovine acc2 ct domain in complex with inhibitor                                                                                    |
| 26 | <a href="#">c3ff6D_</a> | Alignment | not modelled | 100.0 | 18 | <b>PDB header:</b> ligase<br><b>Chain:</b> D: <b>PDB Molecule:</b> acetyl-coa carboxylase 2;<br><b>PDBTitle:</b> human acc2 ct domain with cp-640186                                                                                              |
| 27 | <a href="#">c1od4C_</a> | Alignment | not modelled | 100.0 | 14 | <b>PDB header:</b> ligase<br><b>Chain:</b> C: <b>PDB Molecule:</b> acetyl-coenzyme a carboxylase;<br><b>PDBTitle:</b> acetyl-coa carboxylase carboxyltransferase domain                                                                           |
| 28 | <a href="#">c1uytC_</a> | Alignment | not modelled | 100.0 | 15 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> acetyl-coa carboxylase;<br><b>PDBTitle:</b> acetyl-coa carboxylase carboxyltransferase domain                                                                             |
|    |                         |           |              |       |    | <b>PDB header:</b> transferase                                                                                                                                                                                                                    |

|    |                         |           |              |       |    |                                                                                                                                                                                                                                                                               |
|----|-------------------------|-----------|--------------|-------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29 | <a href="#">c3h0jA_</a> | Alignment | not modelled | 100.0 | 15 | <b>Chain:</b> A: <b>PDB Molecule:</b> acetyl-coa carboxylase;<br><b>PDBTitle:</b> crystal structure of the carboxyltransferase domain of2 acetyl-coenzyme a carboxylase in complex with compound 2                                                                            |
| 30 | <a href="#">d1uyra2</a> | Alignment | not modelled | 99.9  | 18 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                                                   |
| 31 | <a href="#">d1uyra1</a> | Alignment | not modelled | 99.9  | 17 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Biotin dependent carboxylase carboxyltransferase domain                                                                                                                                   |
| 32 | <a href="#">c3r6hA_</a> | Alignment | not modelled | 99.2  | 13 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase, echa3;<br><b>PDBTitle:</b> crystal structure of an enoyl-coa hydratase (echa3) from mycobacterium2 marinum                                                                             |
| 33 | <a href="#">c2fbmB_</a> | Alignment | not modelled | 99.2  | 16 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> y chromosome chromodomain protein 1, telomeric isoform b;<br><b>PDBTitle:</b> acetyltransferase domain of cdy1                                                              |
| 34 | <a href="#">d2a7ka1</a> | Alignment | not modelled | 99.2  | 11 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 35 | <a href="#">c3peaD_</a> | Alignment | not modelled | 99.1  | 10 | <b>PDB header:</b> isomerase<br><b>Chain:</b> D: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase family protein;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from bacillus anthracis str.2 'ames ancestor'                                                |
| 36 | <a href="#">c2q35A_</a> | Alignment | not modelled | 99.1  | 13 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> curf;<br><b>PDBTitle:</b> crystal structure of the y82f variant of ech2 decarboxylase domain of2 curf from lynngbya majuscula                                                                               |
| 37 | <a href="#">d2fw2a1</a> | Alignment | not modelled | 99.1  | 16 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 38 | <a href="#">c2f6qA_</a> | Alignment | not modelled | 99.1  | 19 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> peroxisomal 3,2-trans-enoyl-coa isomerase;<br><b>PDBTitle:</b> the crystal structure of human peroxisomal delta3, delta2 enoyl coa2 isomerase (peci)                                                    |
| 39 | <a href="#">c3fduF_</a> | Alignment | not modelled | 99.1  | 18 | <b>PDB header:</b> isomerase<br><b>Chain:</b> F: <b>PDB Molecule:</b> putative enoyl-coa hydratase/isomerase;<br><b>PDBTitle:</b> crystal structure of a putative enoyl-coa hydratase/isomerase from2 acinetobacter baumannii                                                 |
| 40 | <a href="#">d1xx4a_</a> | Alignment | not modelled | 99.1  | 15 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 41 | <a href="#">c3i47A_</a> | Alignment | not modelled | 99.1  | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl coa hydratase/isomerase (crotonase);<br><b>PDBTitle:</b> crystal structure of putative enoyl coa hydratase/isomerase2 (crotonase) from legionella pneumophila subsp. pneumophila str.3 philadelphia 1 |
| 42 | <a href="#">c2ej5B_</a> | Alignment | not modelled | 99.1  | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> enoyl-coa hydratase subunit ii;<br><b>PDBTitle:</b> crystal structure of gk2038 protein (enoyl-coa hydratase subunit ii)2 from geobacillus kaustophilus                                                     |
| 43 | <a href="#">d1nzya_</a> | Alignment | not modelled | 99.1  | 15 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 44 | <a href="#">c3rrvC_</a> | Alignment | not modelled | 99.1  | 17 | <b>PDB header:</b> isomerase<br><b>Chain:</b> C: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase;<br><b>PDBTitle:</b> crystal structure of an enoyl-coa hydratase/isomerase from2 mycobacterium paratuberculosis                                                           |
| 45 | <a href="#">c3lkeA_</a> | Alignment | not modelled | 99.1  | 13 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from bacillus2 halodurans                                                                                                 |
| 46 | <a href="#">c2vx2D_</a> | Alignment | not modelled | 99.1  | 15 | <b>PDB header:</b> isomerase<br><b>Chain:</b> D: <b>PDB Molecule:</b> enoyl-coa hydratase domain-containing protein 3;<br><b>PDBTitle:</b> crystal structure of human enoyl coenzyme a hydratase2 domain-containing protein 3 (echdc3)                                        |
| 47 | <a href="#">d1wz8a1</a> | Alignment | not modelled | 99.0  | 16 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 48 | <a href="#">d2f6qa1</a> | Alignment | not modelled | 99.0  | 20 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 49 | <a href="#">c3hrxD_</a> | Alignment | not modelled | 99.0  | 20 | <b>PDB header:</b> lyase<br><b>Chain:</b> D: <b>PDB Molecule:</b> probable enoyl-coa hydratase;<br><b>PDBTitle:</b> crystal structure of phenylacetic acid degradation protein paag                                                                                           |
| 50 | <a href="#">c3mybA_</a> | Alignment | not modelled | 99.0  | 13 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase mycobacterium smegmatis                                                                                                   |
| 51 | <a href="#">d1uiya_</a> | Alignment | not modelled | 99.0  | 20 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                                            |
| 52 | <a href="#">c3oc7A_</a> | Alignment | not modelled | 99.0  | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase;<br><b>PDBTitle:</b> crystal structure of an enoyl-coa hydratase from mycobacterium avium                                                                                               |
| 53 | <a href="#">c3kqfC_</a> | Alignment | not modelled | 99.0  | 14 | <b>PDB header:</b> isomerase<br><b>Chain:</b> C: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase family protein;<br><b>PDBTitle:</b> 1.8 angstrom resolution crystal structure of enoyl-coa hydratase from2 bacillus anthracis.<br><b>PDB header:</b> hydrolase            |

|    |                         |           |              |      |    |                                                                                                                                                                                                                                               |
|----|-------------------------|-----------|--------------|------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 54 | <a href="#">c3isaA_</a> | Alignment | not modelled | 99.0 | 12 | <b>Chain:</b> A: <b>PDB Molecule:</b> putative enoyl-coa hydratase/isomerase; <b>PDBTitle:</b> crystal structure of putative enoyl-coa hydratase/isomerase from2 bordetella parapertussis                                                     |
| 55 | <a href="#">d1dcia_</a> | Alignment | not modelled | 99.0 | 16 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 56 | <a href="#">c2qq3F_</a> | Alignment | not modelled | 99.0 | 12 | <b>PDB header:</b> lyase<br><b>Chain:</b> F: <b>PDB Molecule:</b> enoyl-coa hydratase subunit i; <b>PDBTitle:</b> crystal structure of enoyl-coa hydrates subunit i (gk_2039)2 other form from geobacillus kaustophilus hta426                |
| 57 | <a href="#">c3q1tB_</a> | Alignment | not modelled | 99.0 | 11 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from mycobacterium avium                                                                     |
| 58 | <a href="#">c3l3sF_</a> | Alignment | not modelled | 99.0 | 14 | <b>PDB header:</b> isomerase<br><b>Chain:</b> F: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase family protein; <b>PDBTitle:</b> crystal structure of an enoyl-coa hydrotase/isomerase family2 protein from silicibacter pomeroyi         |
| 59 | <a href="#">d1sg4a1</a> | Alignment | not modelled | 99.0 | 14 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 60 | <a href="#">c3omeE_</a> | Alignment | not modelled | 99.0 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> E: <b>PDB Molecule:</b> enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of a probable enoyl-coa hydratase from mycobacterium2 smegmatis                                                     |
| 61 | <a href="#">c3g64A_</a> | Alignment | not modelled | 99.0 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of putative enoyl-coa hydratase from streptomyces2 coelicolor a3(2)                                        |
| 62 | <a href="#">d1hzda_</a> | Alignment | not modelled | 99.0 | 14 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 63 | <a href="#">c3njbA_</a> | Alignment | not modelled | 98.9 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from mycobacterium smegmatis,2 iodide soak                                                   |
| 64 | <a href="#">c3moyA_</a> | Alignment | not modelled | 98.9 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of probable enoyl-coa hydratase from mycobacterium2 smegmatis                                              |
| 65 | <a href="#">c3p5mB_</a> | Alignment | not modelled | 98.9 | 21 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase; <b>PDBTitle:</b> crystal structure of an enoyl-coa hydratase/isomerase from2 mycobacterium avium                                         |
| 66 | <a href="#">c3rsiA_</a> | Alignment | not modelled | 98.9 | 16 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative enoyl-coa hydratase/isomerase; <b>PDBTitle:</b> the structure of a putative enoyl-coa hydratase/isomerase from2 mycobacterium abscessus atcc 19977 / dsm 44196 |
| 67 | <a href="#">c2ppyE_</a> | Alignment | not modelled | 98.9 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> E: <b>PDB Molecule:</b> enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of enoyl-coa hydrates (gk_1992) from geobacillus2 kaustophilus hta426                                               |
| 68 | <a href="#">d1pjha_</a> | Alignment | not modelled | 98.9 | 16 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 69 | <a href="#">c2iexA_</a> | Alignment | not modelled | 98.9 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> dihydroxynapthoic acid synthetase; <b>PDBTitle:</b> crystal structure of dihydroxynapthoic acid synthetase (gk2873) from2 geobacillus kaustophilus hta426                   |
| 70 | <a href="#">c3h0uB_</a> | Alignment | not modelled | 98.9 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative enoyl-coa hydratase; <b>PDBTitle:</b> crystal structure of a putative enoyl-coa hydratase from2 streptomyces avermitilis                                           |
| 71 | <a href="#">d1ef8a_</a> | Alignment | not modelled | 98.9 | 15 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 72 | <a href="#">c3ot6A_</a> | Alignment | not modelled | 98.9 | 13 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase family protein; <b>PDBTitle:</b> crystal structure of an enoyl-coa hydratase/isomerase family protein2 from pseudomonas syringae          |
| 73 | <a href="#">d1rjma_</a> | Alignment | not modelled | 98.9 | 19 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 74 | <a href="#">d1q52a_</a> | Alignment | not modelled | 98.9 | 16 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                            |
| 75 | <a href="#">c3h81A_</a> | Alignment | not modelled | 98.9 | 12 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase echa8; <b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from mycobacterium2 tuberculosis                                                       |
| 76 | <a href="#">c3qmiA_</a> | Alignment | not modelled | 98.9 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase, echa8_6; <b>PDBTitle:</b> crystal structure of enoyl-coa hydratase echa8_6 from mycobacterium2 marinum                                                 |
| 77 | <a href="#">c3sllC_</a> | Alignment | not modelled | 98.9 | 15 | <b>PDB header:</b> isomerase<br><b>Chain:</b> C: <b>PDB Molecule:</b> probable enoyl-coa hydratase/isomerase; <b>PDBTitle:</b> crystal structure of a probable enoyl-coa hydratase/isomerase from2 mycobacterium abscessus                    |
| 78 | <a href="#">c3hp0B_</a> | Alignment | not modelled | 98.9 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> putative polyketide biosynthesis enoyl-coa<br><b>PDBTitle:</b> crystal structure of a putative polyketide biosynthesis2 enoyl-coa hydratase (pksh) from bacillus subtilis   |
|    |                         |           |              |      |    | <b>PDB header:</b> lyase<br><b>Chain:</b> C: <b>PDB Molecule:</b> menb;                                                                                                                                                                       |

|     |                         |           |              |      |    |                                                                                                                                                                                                                                                                 |
|-----|-------------------------|-----------|--------------|------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 79  | <a href="#">c1rjnC_</a> | Alignment | not modelled | 98.8 | 18 | <b>PDBTitle:</b> the crystal structure of menb (rv0548c) from mycobacterium2 tuberculosis in complex with the coa portion of naphthoyl coa                                                                                                                      |
| 80  | <a href="#">c3hinA_</a> | Alignment | not modelled | 98.8 | 14 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative 3-hydroxybutyryl-coa dehydratase;<br><b>PDBTitle:</b> crystal structure of putative enoyl-coa hydratase from2 rhodopseudomonas palustris cga009                                      |
| 81  | <a href="#">d2f6ia1</a> | Alignment | not modelled | 98.8 | 17 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Clp protease, ClpP subunit                                                                                                                                                  |
| 82  | <a href="#">c3ju1A_</a> | Alignment | not modelled | 98.8 | 15 | <b>PDB header:</b> lyase, isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase family protein;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase/isomerase family protein                                                |
| 83  | <a href="#">c3h02F_</a> | Alignment | not modelled | 98.8 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> F: <b>PDB Molecule:</b> naphthoate synthase;<br><b>PDBTitle:</b> 2.15 angstrom resolution crystal structure of naphthoate synthase from2 salmonella typhimurium.                                                      |
| 84  | <a href="#">c3p85A_</a> | Alignment | not modelled | 98.8 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase;<br><b>PDBTitle:</b> crystal structure enoyl-coa hydratase from mycobacterium avium                                                                                       |
| 85  | <a href="#">c3gkbA_</a> | Alignment | not modelled | 98.8 | 17 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative enoyl-coa hydratase;<br><b>PDBTitle:</b> crystal structure of a putative enoyl-coa hydratase from streptomyces2 avermitilis                          |
| 86  | <a href="#">d1mj3a_</a> | Alignment | not modelled | 98.8 | 15 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                              |
| 87  | <a href="#">c3bptA_</a> | Alignment | not modelled | 98.8 | 12 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 3-hydroxyisobutyryl-coa hydrolase;<br><b>PDBTitle:</b> crystal structure of human beta-hydroxyisobutyryl-coa hydrolase in2 complex with quercetin                                         |
| 88  | <a href="#">d1wdka4</a> | Alignment | not modelled | 98.8 | 14 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                              |
| 89  | <a href="#">d1y7oa1</a> | Alignment | not modelled | 98.8 | 24 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Clp protease, ClpP subunit                                                                                                                                                  |
| 90  | <a href="#">c2j5lF_</a> | Alignment | not modelled | 98.8 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> F: <b>PDB Molecule:</b> p-hydroxycinnamoyl coa hydratase/lyase;<br><b>PDBTitle:</b> crystal structure of hydroxycinnamoyl-coa hydratase-lyase                                                                         |
| 91  | <a href="#">c2f6lG_</a> | Alignment | not modelled | 98.8 | 18 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> G: <b>PDB Molecule:</b> atp-dependent clp protease, putative;<br><b>PDBTitle:</b> crystal structure of the clpp protease catalytic domain from2 plasmodium falciparum                                             |
| 92  | <a href="#">d2cbya1</a> | Alignment | not modelled | 98.8 | 18 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Clp protease, ClpP subunit                                                                                                                                                  |
| 93  | <a href="#">c2hw5F_</a> | Alignment | not modelled | 98.8 | 16 | <b>PDB header:</b> lyase<br><b>Chain:</b> F: <b>PDB Molecule:</b> enoyl-coa hydratase;<br><b>PDBTitle:</b> the crystal structure of human enoyl-coenzyme a (coa) hydratase short2 chain 1, echs1                                                                |
| 94  | <a href="#">c3q7hM_</a> | Alignment | not modelled | 98.8 | 22 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> M: <b>PDB Molecule:</b> atp-dependent clp protease proteolytic subunit;<br><b>PDBTitle:</b> structure of the clpp subunit of the atp-dependent clp protease from2 coxiella burnetii                               |
| 95  | <a href="#">d1szoa_</a> | Alignment | not modelled | 98.8 | 10 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Crotonase-like                                                                                                                                                              |
| 96  | <a href="#">c3he2C_</a> | Alignment | not modelled | 98.8 | 12 | <b>PDB header:</b> lyase<br><b>Chain:</b> C: <b>PDB Molecule:</b> enoyl-coa hydratase echa6;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from mycobacterium2 tuberculosis                                                                      |
| 97  | <a href="#">d1yg6a1</a> | Alignment | not modelled | 98.8 | 25 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Clp protease, ClpP subunit                                                                                                                                                  |
| 98  | <a href="#">c3qxiA_</a> | Alignment | not modelled | 98.8 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase echa1;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase echa1 from mycobacterium2 marinum                                                                     |
| 99  | <a href="#">c1y7oE_</a> | Alignment | not modelled | 98.7 | 24 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> E: <b>PDB Molecule:</b> atp-dependent clp protease proteolytic subunit;<br><b>PDBTitle:</b> the structure of streptococcus pneumoniae a153p clpp                                                                  |
| 100 | <a href="#">c3qxzA_</a> | Alignment | not modelled | 98.7 | 18 | <b>PDB header:</b> lyase, isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase;<br><b>PDBTitle:</b> crystal structure of a probable enoyl-coa hydratase/isomerase from2 mycobacterium abscessus                                     |
| 101 | <a href="#">c2cbyG_</a> | Alignment | not modelled | 98.7 | 19 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> G: <b>PDB Molecule:</b> atp-dependent clp protease proteolytic subunit 1;<br><b>PDBTitle:</b> crystal structure of the atp-dependent clp protease2 proteolytic subunit 1 (clpp1) from mycobacterium2 tuberculosis |
| 102 | <a href="#">c2j5gL_</a> | Alignment | not modelled | 98.7 | 16 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> L: <b>PDB Molecule:</b> alr4455 protein;<br><b>PDBTitle:</b> the native structure of a beta-di ketone hydrolase from the2 cyanobacterium anabaena sp. pcc 7120                                                    |
| 103 | <a href="#">c3qkaB_</a> | Alignment | not modelled | 98.7 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> enoyl-coa hydratase, echa5;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase echa5 from mycobacterium2 marinum                                                                    |
|     |                         |           |              |      |    | <b>PDB header:</b> hydrolase<br><b>Chain:</b> G: <b>PDB Molecule:</b> putative atp-dependent clp protease                                                                                                                                                       |



|     |                         |           |              |      |    |                                                                                                                                                                                                                                        |
|-----|-------------------------|-----------|--------------|------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 104 | <a href="#">c1tg6G_</a> | Alignment | not modelled | 98.7 | 20 | proteolytic subunit;<br><b>PDBTitle:</b> crystallography and mutagenesis point to an essential role for the n-2 terminus of human mitochondrial clpp                                                                                   |
| 105 | <a href="#">c3bezC_</a> | Alignment | not modelled | 98.7 | 21 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> protease 4;<br><b>PDBTitle:</b> crystal structure of escherichia coli signal peptide peptidase (sppa), 2 semet crystals                                          |
| 106 | <a href="#">c3kthD_</a> | Alignment | not modelled | 98.7 | 23 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> D: <b>PDB Molecule:</b> atp-dependent clp protease proteolytic subunit;<br><b>PDBTitle:</b> structure of clpp from bacillus subtilis in orthorhombic crystal form                        |
| 107 | <a href="#">c3swxB_</a> | Alignment | not modelled | 98.7 | 15 | <b>PDB header:</b> isomerase<br><b>Chain:</b> B: <b>PDB Molecule:</b> probable enoyl-coa hydratase/isomerase;<br><b>PDBTitle:</b> crystal structure of a probable enoyl-coa hydratase/isomerase from2 mycobacterium abscessus          |
| 108 | <a href="#">c3m6nA_</a> | Alignment | not modelled | 98.7 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> rpff protein;<br><b>PDBTitle:</b> crystal structure of rpff                                                                                                          |
| 109 | <a href="#">c3p2lD_</a> | Alignment | not modelled | 98.7 | 24 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> D: <b>PDB Molecule:</b> atp-dependent clp protease proteolytic subunit;<br><b>PDBTitle:</b> crystal structure of atp-dependent clp protease subunit p from2 francisella tularensis       |
| 110 | <a href="#">c2d3tB_</a> | Alignment | not modelled | 98.7 | 13 | <b>PDB header:</b> lyase, oxidoreductase/transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> fatty oxidation complex alpha subunit;<br><b>PDBTitle:</b> fatty acid beta-oxidation multienzyme complex from2 pseudomonas fragi, form v |
| 111 | <a href="#">c3laoA_</a> | Alignment | not modelled | 98.7 | 15 | <b>PDB header:</b> lyase, isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase/isomerase;<br><b>PDBTitle:</b> crystal structure of enoyl-coa hydratase from pseudomonas2 aeruginosa pa01                             |
| 112 | <a href="#">d1tg6a1</a> | Alignment | not modelled | 98.7 | 20 | <b>Fold:</b> ClpP/crotonase<br><b>Superfamily:</b> ClpP/crotonase<br><b>Family:</b> Clp protease, ClpP subunit                                                                                                                         |
| 113 | <a href="#">c3r0oA_</a> | Alignment | not modelled | 98.7 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> carnitiny-coa dehydratase;<br><b>PDBTitle:</b> crystal structure of carnitiny-coa hydratase from mycobacterium avium                                                 |
| 114 | <a href="#">c3trrA_</a> | Alignment | not modelled | 98.7 | 12 | <b>PDB header:</b> isomerase<br><b>Chain:</b> A: <b>PDB Molecule:</b> probable enoyl-coa hydratase/isomerase;<br><b>PDBTitle:</b> crystal structure of a probable enoyl-coa hydratase/isomerase from2 mycobacterium abscessus          |
| 115 | <a href="#">c2x58B_</a> | Alignment | not modelled | 98.6 | 17 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> B: <b>PDB Molecule:</b> peroxisomal bifunctional enzyme;<br><b>PDBTitle:</b> the crystal structure of mfe1 liganded with coa                                                        |
| 116 | <a href="#">c2deoA_</a> | Alignment | not modelled | 98.6 | 18 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 441aa long hypothetical nfed protein;<br><b>PDBTitle:</b> 1510-n membrane protease specific for a stomatin homolog from2 pyrococcus horikoshii                   |
| 117 | <a href="#">c3greA_</a> | Alignment | not modelled | 98.6 | 15 | <b>PDB header:</b> lyase<br><b>Chain:</b> A: <b>PDB Molecule:</b> enoyl-coa hydratase, echa12_1;<br><b>PDBTitle:</b> crystal structure of an enoyl-coa hydratase echa12_1 from2 mycobacterium marinum                                  |
| 118 | <a href="#">c2wtbA_</a> | Alignment | not modelled | 98.5 | 16 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> fatty acid multifunctional protein (atmfp2);<br><b>PDBTitle:</b> arabidopsis thaliana multifunctional protein, mfp2                                         |
| 119 | <a href="#">c2w3pB_</a> | Alignment | not modelled | 98.3 | 17 | <b>PDB header:</b> lyase<br><b>Chain:</b> B: <b>PDB Molecule:</b> benzoyl-coa-dihydrodiol lyase;<br><b>PDBTitle:</b> boxc crystal structure                                                                                            |
| 120 | <a href="#">c2pg8C_</a> | Alignment | not modelled | 98.1 | 25 | <b>PDB header:</b> ligand binding protein<br><b>Chain:</b> C: <b>PDB Molecule:</b> dpgc;<br><b>PDBTitle:</b> crystal structure of r254k mutant of dpgc with bound substrate analog                                                     |