

## Rabbit MLYCD Polyclonal Antibody | anti-MLYCD antibody

MLYCD Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                       |
|-----------|--------|-------------------|------------------------------------|
| AAA322908 | Rabbit | Human, Mouse, Rat | Immunohistochemistry, Western Blot |

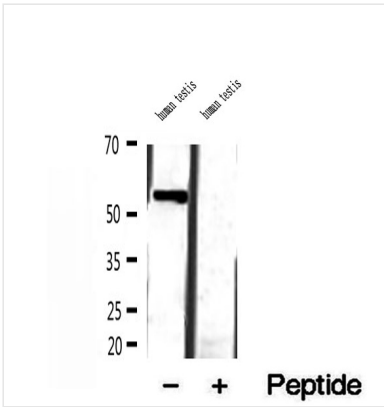
### PRODUCT SYNONYMS

MLYCD; Polyclonal Antibody; MLYCD Antibody; DCMC\_HUMAN; hMCD; Malonyl CoA decarboxylase; Malonyl CoA decarboxylase mitochondrial; Malonyl coenzyme A decarboxylase; Malonyl-CoA decarboxylase; MCD; MGC59795; mitochondrial; Mlycd; anti-MLYCD antibody

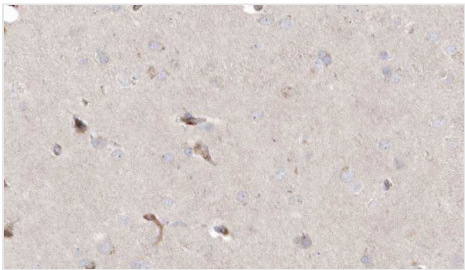
### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                         |
| Reactivity                                      | Human, Mouse, Rat                                                                                                                                                                                                                                              |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                     |
| Isotype                                         | IgG                                                                                                                                                                                                                                                            |
| Specificity                                     | MLYCD antibody detects endogenous levels of MLYCD.                                                                                                                                                                                                             |
| Purity/Purification                             | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.                                                                                                                                                                  |
| Form/Format                                     | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                  |
| Concentration                                   | 1mg/ml (varies by lot)                                                                                                                                                                                                                                         |
| Sequence Length                                 | 493                                                                                                                                                                                                                                                            |
| Applicable Applications for anti-MLYCD antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                                                                  |
| Immunogen                                       | A synthesized peptide derived from human MLYCD.                                                                                                                                                                                                                |
| Subcellular Location                            | Mitochondrion. Cytoplasm. Peroxisome.                                                                                                                                                                                                                          |
| Tissue Specificity                              | Expressed in fibroblasts and hepatoblastoma cells (at protein level). Expressed strongly in heart, liver, skeletal muscle, kidney and pancreas. Expressed in myotubes. Expressed weakly in brain, placenta, spleen, thymus, testis, ovary and small intestine. |
| Predicted Cross Reactivity                      | <b>Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus</b>                                                                                                                                                                                              |
| Similarity                                      | Pig (100%), Zebrafish (82%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (92%), Dog (100%), Xenopus (92%)                                                                                                                                                |
| Conjugation                                     | Unconjugated                                                                                                                                                                                                                                                   |
| Preparation and Storage                         | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                              |

IMAGES



**WB (Western Blot)**  
Western blot analysis of extracts of human testis tissue, using MLYCD antibody.



**IHC (Immunohistochemistry)**  
AAA322908 at 1/100 staining Human brain cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-MLYCD antibody</b> | <p>Function: Catalyzes the conversion of malonyl-CoA to acetyl-CoA. In the fatty acid biosynthesis MCD selectively removes malonyl-CoA and thus assures that methyl-malonyl-CoA is the only chain elongating substrate for fatty acid synthase and that fatty acids with multiple methyl side chains are produced. In peroxisomes it may be involved in degrading intraperoxisomal malonyl-CoA, which is generated by the peroxisomal beta-oxidation of odd chain-length dicarboxylic fatty acids. Plays a role in the metabolic balance between glucose and lipid oxidation in muscle independent of alterations in insulin signaling. May play a role in controlling the extent of ischemic injury by promoting glucose oxidation.</p> <p>Subunit Structure: Homotetramer. Dimer of dimers. The two subunits within a dimer display conformational differences suggesting that at any given moment, only one of the two subunits is competent for malonyl-CoA binding and catalytic activity. Under oxidizing conditions, can form disulfide-linked homotetramers (in vitro). Associates with the peroxisomal targeting signal receptor PEX5.</p> <p>Post-translational Modifications: Acetylation at Lys-472 activates malonyl-CoA decarboxylase activity. Deacetylation at Lys-472 by SIRT4 represses activity, leading to promote lipogenesis (By similarity).Interchain disulfide bonds may form in peroxisomes (Potential). Interchain disulfide bonds are not expected to form in the reducing environment of the cytoplasm and mitochondria.</p> |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| NCBI GI #                        | 110349750                                             |
| NCBI GeneID                      | 23417                                                 |
| NCBI Accession #                 | NP_036345.2                                           |
| NCBI GenBank Nucleotide #        | NM_012213.2                                           |
| UniProt Accession #              | O95822; Q9UNU5; Q9Y3F2                                |
| Molecular Weight                 | Observed: 50 kDa; 55 kDa; 66 kDa<br>Predicted: 56 kDa |
| NCBI Official Full Name          | malonyl-CoA decarboxylase, mitochondrial              |
| NCBI Official Synonym Full Names | malonyl-CoA decarboxylase                             |
| NCBI Official Symbol             | MLYCD                                                 |
| NCBI Official Synonym Symbols    | MCD                                                   |
| NCBI Protein Information         | malonyl-CoA decarboxylase, mitochondrial              |
| UniProt Protein Name             | Malonyl-CoA decarboxylase, mitochondrial              |
| UniProt Gene Name                | MLYCD                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mlycd-antibody-immunohistochemistry-western-blot-elisa/322908>