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ACAT1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP11099a

Specification

ACAT1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P24752

ACAT1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 38

Other Names
Acetyl-CoA acetyltransferase, mitochondrial, Acetoacetyl-CoA thiolase, T2, ACAT1, ACAT, MAT

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ACAT1 Antibody (N-term) Blocking peptide - Protein Information

Name ACAT1

Synonyms ACAT, MAT

Function
This is one of the enzymes that catalyzes the last step of the mitochondrial beta-oxidation pathway, an aerobic process breaking down fatty acids into acetyl-CoA (PubMed:1715688, PubMed:7728148, PubMed:9744475). Using free coenzyme A/CoA, catalyzes the thiolytic cleavage of medium- to long-chain 3-oxoacyl-CoAs into acetyl-CoA and a fatty acyl-CoA shortened by two carbon atoms (PubMed:1715688, PubMed:7728148, PubMed:9744475). The activity of the enzyme is reversible and it can also catalyze the condensation of two acetyl-CoA molecules into acetoacetyl-CoA (PubMed:17371050). Thereby, it plays a major role in ketone body metabolism (PubMed:1715688, PubMed:17371050, PubMed:7728148,

PubMed:9744475).

Cellular Location
Mitochondrion.

ACAT1 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ACAT1 Antibody (N-term) Blocking peptide - Images

ACAT1 Antibody (N-term) Blocking peptide - Background

This gene encodes a mitochondrially localized enzyme thatcatalyzes the reversible formation of acetoacetyl-CoA from twomolecules of acetyl-CoA. Defects in this gene are associated with3-ketothiolase deficiency, an inborn error of isoleucine catabolismcharacterized by urinary excretion of 2-methyl-3-hydroxybutyricacid, 2-methylacetoacetic acid, tiglylglycine, and butanone.

ACAT1 Antibody (N-term) Blocking peptide - References

Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)Sakashita, N., et al. J. Lipid Res. 51(6):1263-1272(2010)Reynolds, C.A., et al. Hum. Mol. Genet. 19(10):2068-2078(2010)Fukao, T., et al. Mol. Genet. Metab. 100(1):37-41(2010)Thummler, S., et al. Tohoku J. Exp. Med. 220(1):27-31(2010)