10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACAT1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7560b

Specification

ACAT1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P24752

ACAT1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 38

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7560b was selected from the C-term region of human ACAT1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 (C-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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ACAT1 Antibody (C-term) Blocking Peptide - Images

ACAT1 Antibody (C-term) Blocking Peptide - Background

ACAT1 is a mitochondrially localized enzyme that catalyzes the reversible formation of acetoacetyl-CoA from two molecules of acetyl-CoA. Defects in the gene encoding ACAT1 are associated with the alpha-methylacetoaceticaciduria disorder,an inborn error of isoleucine catabolism characterized by urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, tiglylglycine, and butanone.

ACAT1 Antibody (C-term) Blocking Peptide - References

Locke,J.A.,Prostate 68 (1), 20-33 (2008)Guo,Z.Y.,Biochemistry 46 (35), 10063-10071 (2007)Haapalainen,A.M.,Biochemistry 46 (14), 4305-4321 (2007)