

**ACAT1 Blocking Peptide (C-term)**

Synthetic peptide

Catalog # BP20741c

**Specification**

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

Primary Accession

[P24752](#)

Other Accession

[Q8HXY6](#)**ACAT1 Blocking Peptide (C-term) - Additional Information****Gene ID** 38**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence is selected from aa 393-406 of HUMAN ACAT1

**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 Blocking Peptide (C-term) - 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:<a href="http://www.uniprot.org/citations/1715688" target="\_blank">1715688</a>, PubMed:<a href="http://www.uniprot.org/citations/7728148" target="\_blank">7728148</a>, PubMed:<a href="http://www.uniprot.org/citations/9744475" target="\_blank">9744475</a>). 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:<a href="http://www.uniprot.org/citations/1715688" target="\_blank">1715688</a>, PubMed:<a href="http://www.uniprot.org/citations/7728148" target="\_blank">7728148</a>, PubMed:<a href="http://www.uniprot.org/citations/9744475" target="\_blank">9744475</a>). The activity of the enzyme is reversible and it can also catalyze the condensation of two acetyl-CoA molecules into acetoacetyl-CoA (PubMed:<a href="http://www.uniprot.org/citations/17371050" target="\_blank">17371050</a>).

target="\_blank">17371050</a>). Thereby, it plays a major role in ketone body metabolism (PubMed:<a href="http://www.uniprot.org/citations/1715688" target="\_blank">1715688</a>, PubMed:<a href="http://www.uniprot.org/citations/17371050" target="\_blank">17371050</a>, PubMed:<a href="http://www.uniprot.org/citations/7728148" target="\_blank">7728148</a>, PubMed:<a href="http://www.uniprot.org/citations/9744475" target="\_blank">9744475</a>).

#### **Cellular Location**

Mitochondrion.

#### **ACAT1 Blocking Peptide (C-term) - Protocols**

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

- [Blocking Peptides](#)

#### **ACAT1 Blocking Peptide (C-term) - Images**

#### **ACAT1 Blocking Peptide (C-term) - Background**

Plays a major role in ketone body metabolism.

#### **ACAT1 Blocking Peptide (C-term) - References**

Fukao T.,et al.J. Clin. Invest. 86:2086-2092(1990).  
Kano M.,et al.Gene 109:285-290(1991).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Aboulaich N.,et al.Biochem. J. 383:237-248(2004).