

# **ACOT8 Antibody (C-term) Blocking Peptide**

Synthetic peptide Catalog # BP9144b

## **Specification**

## ACOT8 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>014734</u>

## ACOT8 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 10005** 

#### **Other Names**

Acyl-coenzyme A thioesterase 8, Acyl-CoA thioesterase 8, Choloyl-coenzyme A thioesterase, HIV-Nef-associated acyl-CoA thioesterase, PTE-2, Peroxisomal acyl-coenzyme A thioester hydrolase 1, PTE-1, Peroxisomal long-chain acyl-CoA thioesterase 1, Thioesterase II, hACTE-III, hACTEIII, hTE, ACOT8, ACTEIII, PTE1, PTE2

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP9144b>AP9144b</a> was selected from the C-term region of human ACOT8. 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.

## ACOT8 Antibody (C-term) Blocking Peptide - Protein Information

## Name ACOT8

Synonyms ACTEIII, PTE1 {ECO:0000303|PubMed:100925

#### **Function**

Catalyzes the hydrolysis of acyl-CoAs into free fatty acids and coenzyme A (CoASH), regulating their respective intracellular levels (PubMed:<a href="http://www.uniprot.org/citations/15194431" target="\_blank">15194431</a>, PubMed:<a href="http://www.uniprot.org/citations/9153233" target="\_blank">9153233</a>, PubMed:<a href="http://www.uniprot.org/citations/9299485" target="\_blank">9299485</a>). Displays no strong substrate specificity with respect to the carboxylic acid moiety of Acyl-CoAs (By similarity). Hydrolyzes medium length (C2 to C20) straight-chain, saturated and unsaturated acyl-CoAS but is inactive towards substrates with longer



aliphatic chains (PubMed:<a href="http://www.uniprot.org/citations/9153233" target="\_blank">9153233</a>, PubMed:<a href="http://www.uniprot.org/citations/9299485" target="\_blank">9299485</a>). Moreover, it catalyzes the hydrolysis of CoA esters of bile acids, such as choloyl-CoA and chenodeoxycholoyl-CoA and competes with bile acid CoA:amino acid N-acyltransferase (BAAT) (By similarity). Is also able to hydrolyze CoA esters of dicarboxylic acids (By similarity). It is involved in the metabolic regulation of peroxisome proliferation (PubMed:<a href="http://www.uniprot.org/citations/15194431" target="blank">15194431</a><a href="http://www.uniprot.org/citations/15194431" target="blank">15194431</a>>).

### **Cellular Location**

Peroxisome matrix. Note=Predominantly localized in the peroxisome but a localization to the cytosol cannot be excluded

#### **Tissue Location**

Detected in a T-cell line (at protein level). Ubiquitous (PubMed:9153233, PubMed:9299485)

## **ACOT8 Antibody (C-term) Blocking Peptide - Protocols**

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

## Blocking Peptides

**ACOT8 Antibody (C-term) Blocking Peptide - Images** 

## ACOT8 Antibody (C-term) Blocking Peptide - Background

Acyl-CoA thioesterases are a group of enzymes that catalyze the hydrolysis of acyl-CoAs to the free fatty acid and coenzyme A (CoASH), providing the potential to regulate intracellular levels of acyl-CoAs, free fatty acids and CoASH. It may mediate Nef-induced down-regulation of CD4. It may be involved in the metabolic regulation of peroxisome proliferation.

## ACOT8 Antibody (C-term) Blocking Peptide - References

Choudhary C., et.al., Science 325:834-840(2009). Daub H., et.al., Mol. Cell 31:438-448(2008).