

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

Synthetic peptide

Catalog # BP21424b

**Specification**

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**ACOT8 Blocking Peptide (C-term) - Product Information**

Primary Accession

[O14734](#)**ACOT8 Blocking Peptide (C-term) - 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 is selected from aa 275-290 of HUMAN ACOT8

**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 Blocking Peptide (C-term) - 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/9299485" target="\_blank">9299485</a>, PubMed:<a href="http://www.uniprot.org/citations/9153233" target="\_blank">9153233</a>, PubMed:<a href="http://www.uniprot.org/citations/15194431" target="\_blank">15194431</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/9299485" target="\_blank">9299485</a>, PubMed:<a href="http://www.uniprot.org/citations/9153233" target="\_blank">9153233</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>).

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

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

- [Blocking Peptides](#)

**ACOT8 Blocking Peptide (C-term) - Images****ACOT8 Blocking Peptide (C-term) - 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. May mediate Nef-induced down-regulation of CD4. Major thioesterase in peroxisomes. Competes with BAAT (Bile acid CoA: amino acid N- acyltransferase) for bile acid-CoA substrate (such as chenodeoxycholoyl-CoA). Shows a preference for medium-length fatty acyl-CoAs (By similarity). May be involved in the metabolic regulation of peroxisome proliferation.

**ACOT8 Blocking Peptide (C-term) - References**

Watanabe H.,et al.Biochem. Biophys. Res. Commun. 238:234-239(1997).  
Liu L.X.,et al.J. Biol. Chem. 272:13779-13785(1997).  
Jones J.M.,et al.J. Biol. Chem. 274:9216-9223(1999).  
Deloukas P.,et al.Nature 414:865-871(2001).  
Ishizuka M.,et al.Exp. Cell Res. 297:127-141(2004).