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ACOT8 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP21424b

Specification

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:15194431, PubMed:9153233, PubMed:9299485). 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:9153233, PubMed:9299485). 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:15194431).

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).
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