

ACOT8 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21424b

Product Information

Application	WB, E
Primary Accession	<u>014734</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB48192
Calculated MW	35914

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	This ACOT8 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 275-310 amino acids from the C-terminal region of human ACOT8.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ACOT8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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: <u>15194431</u> , PubMed: <u>9153233</u> , PubMed: <u>9299485</u>). 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: <u>9153233</u> , PubMed: <u>9299485</u>). 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: <u>15194431</u>).
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)

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.

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).

Images



All lanes : Anti-ACOT8 Antibody (C-term) at 1:2000 dilution Lane 1: mouse liver lysates Lane 2: rat liver lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.