

ACOT8 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50587

Specification

ACOT8 Antibody - Product Information

Application WB, IF
Primary Accession O14734
Reactivity Human, Mouse, Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 36 KDa
Antigen Region 163-189

ACOT8 Antibody - 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

Dilution

WB~~ 1:1000 IF~~1:100

Format

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

ACOT8 Antibody - 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

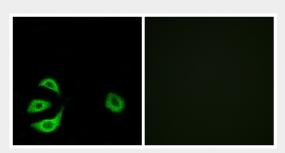
Detected in a T-cell line (at protein level). Ubiquitous (PubMed:9153233, PubMed:9299485)

ACOT8 Antibody - Protocols

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

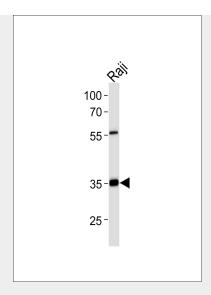
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ACOT8 Antibody - Images



Immunofluorescence analysis of A549 cells, using ACOT8 antibody.





Western blot analysis of lysate from Raji cell line,using ACOT8 Antibody(AP50587). AP50587 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

ACOT8 Antibody - 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 Antibody - 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).