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ACOT8 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50587

Product Information

Application	WB, IF
Primary Accession	O14734
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
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
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℃

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)

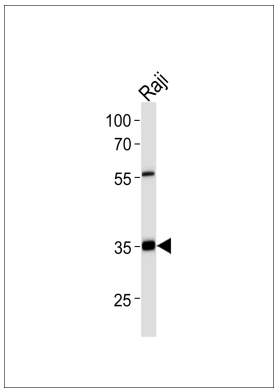
Background

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.

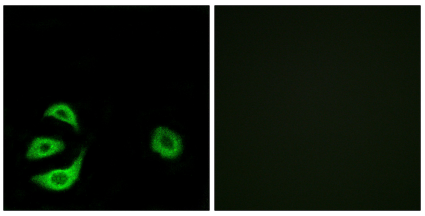
References

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



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.



Immunofluorescence analysis of A549 cells, using ACOT8 antibody.

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