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ACOT8 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9144b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O14734
Reactivity	Human, Mouse
Predicted	Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23177
Calculated MW	35914
Antigen Region	290-319

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 rabbits immunized with a KLH conjugated synthetic peptide between 290-319 amino acids from the C-terminal region of human ACOT8.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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: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)

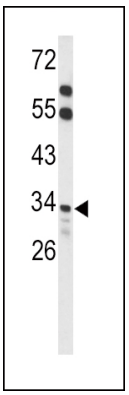
Background

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. It may mediate Nef-induced down-regulation of CD4. It may be involved in the metabolic regulation of peroxisome proliferation.

References

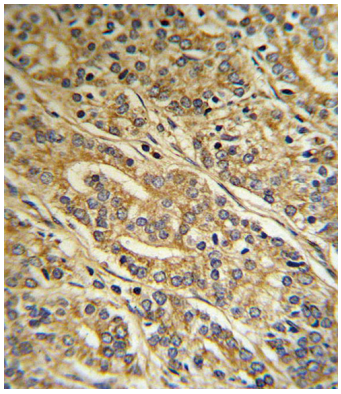
Choudhary C., et.al., Science 325:834-840(2009).
Daub H., et.al., Mol. Cell 31:438-448(2008).

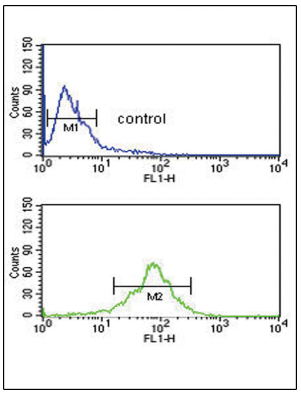
Images



Western blot analysis of ACOT8 Antibody (C-term) (Cat. #AP9144b) in mouse liver tissue lysates (35ug/lane). ACOT8 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human Prostate carcinoma reacted with ACOT8 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





ACOT8 Antibody (C-term) (Cat. #AP9144b) flow cytometric analysis of MDA-MB435 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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