10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACOT8 Polyclonal Antibody

Catalog # AP68272

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	O14734
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35914

Additional Information

Gene ID	10005
Other Names	ACOT8; ACTEIII; PTE1; PTE2; 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 lon
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

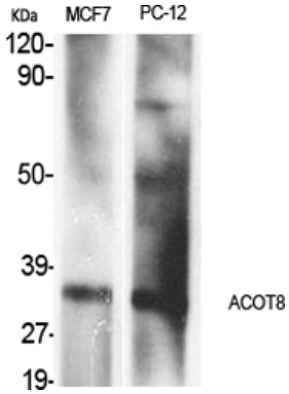
Name	ACOT8
Synonyms	ACTEIII, PTE1 {ECO:0000303|PubMed:100925
Function	Catalyzes the hydrolysis of acyl-CoAs into free fatty acids and coenzyme A (CoASH), regulating their respective intracellular levels (PubMed:15194431, PubMed:9153233, PubMed:9299485). Displays no strong substrate specificity with respect 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)

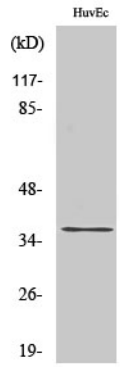
Background

Acyl-coenzyme A (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 (PubMed:9299485, PubMed:9153233, PubMed:15194431). Competes with bile acid CoA:amino acid N-acyltransferase (BAAT) for bile acid-CoA substrate (such as chenodeoxycholoyl-CoA). Shows a preference for medium-length fatty acyl-CoAs (C2 to C20) (PubMed:9299485, PubMed:9153233). Inactive towards substrates with more than C20 aliphatic chains (PubMed:9153233). Involved in the metabolic regulation of peroxisome proliferation (PubMed:15194431).

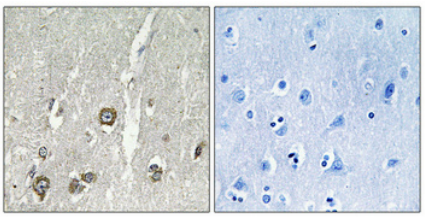
Images



Western Blot analysis of various cells using ACOT8 Polyclonal Antibody



Western Blot analysis of HuvEc cells using ACOT8 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.