

ACAT1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20741c

Product Information

Application	WB, E
Primary Accession	<u>P24752</u>
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50055
Calculated MW	45200

Additional Information

Gene ID	38
Other Names	Acetyl-CoA acetyltransferase, mitochondrial, Acetoacetyl-CoA thiolase, T2, ACAT1, ACAT, MAT
Target/Specificity	This ACAT1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 393-426 amino acids from the C-terminal region of human ACAT1.
Dilution	WB~~1:1000 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	ACAT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ACAT1
Synonyms	ACAT, MAT
Function	This is one of the enzymes that catalyzes the last step of the mitochondrial beta-oxidation pathway, an aerobic process breaking down fatty acids into acetyl-CoA (PubMed: <u>1715688</u> , PubMed: <u>7728148</u> , PubMed: <u>9744475</u>). Using

free coenzyme A/CoA, catalyzes the thiolytic cleavage of medium- to long-chain 3-oxoacyl-CoAs into acetyl-CoA and a fatty acyl-CoA shortened by two carbon atoms (PubMed:<u>1715688</u>, PubMed:<u>7728148</u>, PubMed:<u>9744475</u>). The activity of the enzyme is reversible and it can also catalyze the condensation of two acetyl-CoA molecules into acetoacetyl-CoA (PubMed:<u>17371050</u>). Thereby, it plays a major role in ketone body metabolism (PubMed:<u>1715688</u>, PubMed:<u>17371050</u>, PubMed:<u>7728148</u>, PubMed:<u>9744475</u>).

Cellular Location Mitochondrion.

Background

Plays a major role in ketone body metabolism.

References

Fukao T.,et al.J. Clin. Invest. 86:2086-2092(1990). Kano M.,et al.Gene 109:285-290(1991). Ota T.,et al.Nat. Genet. 36:40-45(2004). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Aboulaich N.,et al.Biochem. J. 383:237-248(2004).

Images



Western blot analysis of lysates from 293, HepG2, SK-BR-3 cell line (from left to right), using ACAT1 Antibody (C-term)(Cat. #AP20741c). AP20741c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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