

ACAT1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5517

Specification

ACAT1 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	P24752
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=45.2 KDa
Isotype	Rabbit Ig
Antigen Source	HUMAN

ACAT1 Antibody (C-term) - Additional Information

Gene ID 38

Antigen Region
311-349

Other Names
Acetyl-CoA acetyltransferase,
mitochondrial, Acetoacetyl-CoA thiolase, T2,
ACAT1, ACAT, MAT

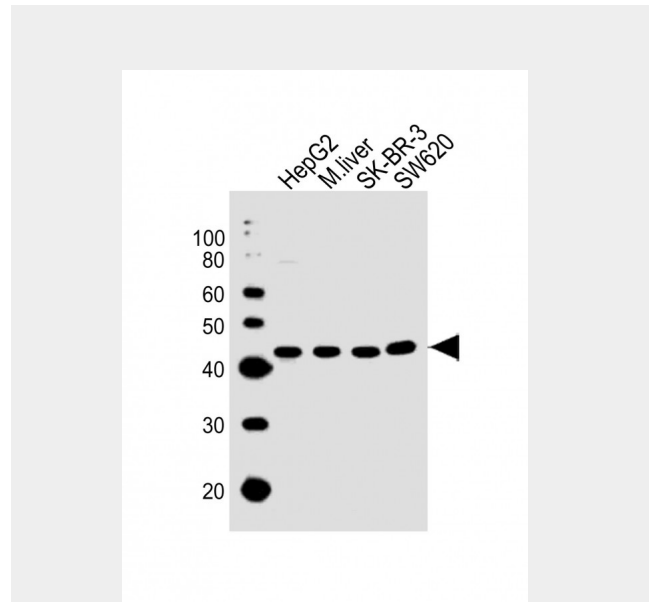
Dilution
WB~~1:1000
IHC-P~~1:10~50

Target/Specificity
This ACAT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-349 amino acids from the C-terminal region of human ACAT1.

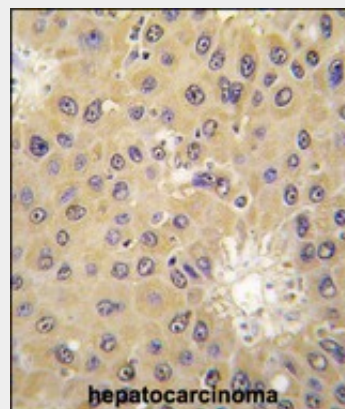
Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ACAT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ACAT1 Antibody (C-term) - Protein Information



All lanes : Anti-ACAT1 Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysates Lane 2: mouse liver lysates Lane 3: SK-BR-3 whole cell lysates Lane 4: SW620 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with ACAT1 antibody (C-term) (Cat.#AW5517), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of

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: [1715688](http://www.uniprot.org/citations/1715688)), PubMed: [7728148](http://www.uniprot.org/citations/7728148)), PubMed: [9744475](http://www.uniprot.org/citations/9744475)). 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: [1715688](http://www.uniprot.org/citations/1715688)), PubMed: [7728148](http://www.uniprot.org/citations/7728148)), PubMed: [9744475](http://www.uniprot.org/citations/9744475)). The activity of the enzyme is reversible and it can also catalyze the condensation of two acetyl-CoA molecules into acetoacetyl-CoA (PubMed: [17371050](http://www.uniprot.org/citations/17371050)), PubMed: [17371050](http://www.uniprot.org/citations/17371050)), PubMed: [1715688](http://www.uniprot.org/citations/1715688)), PubMed: [7728148](http://www.uniprot.org/citations/7728148)), PubMed: [9744475](http://www.uniprot.org/citations/9744475)).

Cellular Location

Mitochondrion.

this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ACAT1 Antibody (C-term) - Background

ACAT1 is a mitochondrially localized enzyme that catalyzes the reversible formation of acetoacetyl-CoA from two molecules of acetyl-CoA. Defects in the gene encoding ACAT1 are associated with the alpha-methylacetoaceticaciduria disorder, an inborn error of isoleucine catabolism characterized by urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, tiglylglycine, and butanone.

ACAT1 Antibody (C-term) - References

Locke, J.A., *Prostate* 68 (1), 20-33 (2008)
Guo, Z.Y., *Biochemistry* 46 (35), 10063-10071 (2007)
Haapalainen, A.M., *Biochemistry* 46 (14), 4305-4321 (2007)

ACAT1 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)