Product Name: ACAT-1 Rabbit Polyclonal Antibody
Catalog #: APRab06470

Summary

Production Name	ACAT-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ACAT1
Alternative Names	ACAT1; ACAT; MAT; Acetyl-CoA acetyltransferase; mitochondrial; Acetoacetyl-CoA thiolase; T2
Gene ID	38.0
SwissProt ID	P24752.The antiserum was produced against synthesized peptide derived from human ACAT1. AA range:221-270

Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:40000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	45kDa

Product Name: ACAT-1 Rabbit Polyclonal Antibody
Catalog #: APRab06470

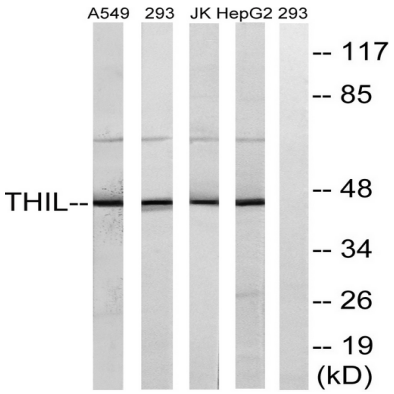
Background

This gene encodes a mitochondrially localized enzyme that catalyzes the reversible formation of acetoacetyl-CoA from two molecules of acetyl-CoA. Defects in this gene are associated with 3-ketothiolase deficiency, an inborn error of isoleucine catabolism characterized by urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, tiglylglycine, and butanone. [provided by RefSeq, Feb 2009],catalytic activity:2 acetyl-CoA = CoA + acetoacetyl-CoA.,disease:Defects in ACAT1 are a cause of 3-ketothiolase deficiency (3KTD) [MIM:203750]; also known as alpha-methylacetoaceticaciduria. 3KTD is an inborn error of isoleucine catabolism characterized by intermittent ketoacidotic attacks associated with unconsciousness. Some patients die during an attack or are mentally retarded. Urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, triglylglycine, butanone is increased. It seems likely that the severity of this disease correlates better with the environmental or acquired factors than with the ACAT1 genotype.,enzyme regulation:Activated by potassium ions, but not sodium ions.,function:Plays a major role in ketone body metabolism.,similarity:Belongs to the thiolase family.,subunit:Homotetramer.,

Research Area

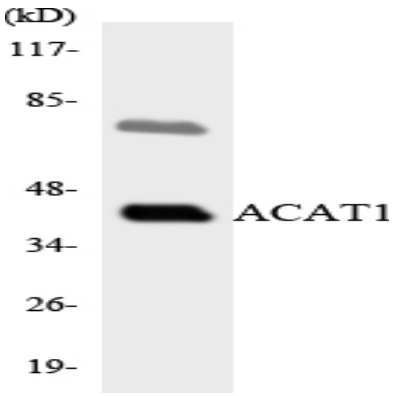
Fatty acid metabolism;Synthesis and degradation of ketone bodies;Valine; leucine and isoleucine degradation;Lysine degradation;Tryptophan metabolism;Pyruvate metabolism;Propanoate metabolism;Butanoate metabolism;Terpenoid backbone biosynthesis;

Image Data

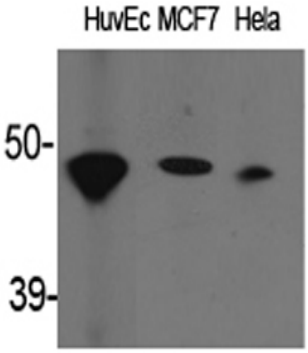


Western blot analysis of lysates from HepG2, Jurkat, 293, and A549 cells, using ACAT1 Antibody. The lane on the right is blocked with the synthesized peptide.

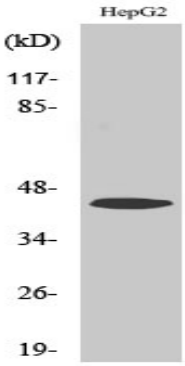
Product Name: ACAT-1 Rabbit Polyclonal Antibody
Catalog #: APRab06470



Western blot analysis of the lysates from HepG2 cells using ACAT1 antibody.



Western Blot analysis of various cells using ACAT-1 Polyclonal Antibody



Western Blot analysis of A549 cells using ACAT-1 Polyclonal Antibody

Note

For research use only.