Product Name: **KD-Validated Acetyl-CoA Acetyltransferase 1 Recombinant Rabbit Monoclonal Antibody**
Catalog #: **KVAb00222**
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 45.2kDa

Antigen Information

Gene Name	ACAT1
Alternative Names	ACAT1; Acetyl-CoA Acetyltransferase 1; THIL; ACAT; Acetyl-CoA Acetyltransferase, Mitochondrial; Acetyl-Coenzyme A Acetyltransferase 1; Acetoacetyl Coenzyme A Thiolase; Acetoacetyl-CoA Thiolase; EC 2.3.1.9; MAT; T2; Mitochondrial Acetoacetyl-CoA Thiolase; Testicular Tissue Protein Li 198; EC 2.3.1
Gene ID	38.0
SwissProt ID	P24752
Immunogen	A synthesized peptide derived from human ACAT1

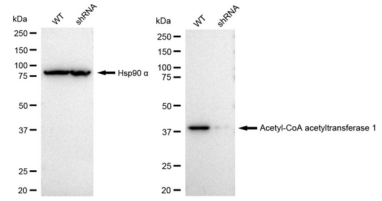
Background

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]

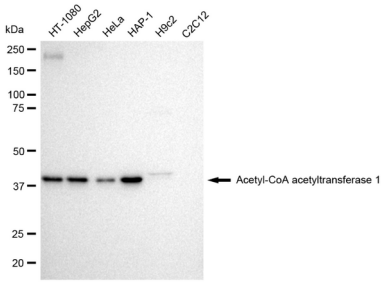
Research Area

Cardiovascular,Metabolism

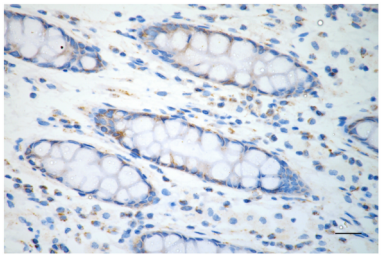
Image Data



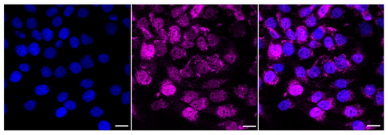
Western blotting analysis using acetyl-CoA acetyltransferase 1 antibody (KVAb00222). Acetyl-CoA acetyltransferase 1 expression in wild type (WT) and acetyl-CoA acetyltransferase 1 (ACAT1) shRNA knockdown (KD) Hela cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with acetyl-CoA acetyltransferase 1 antibody (KVAb00222, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



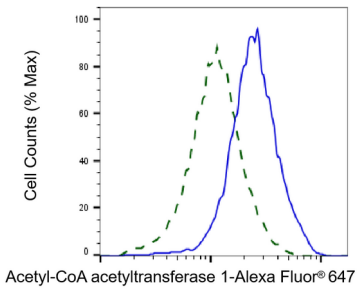
Western blotting analysis using Acetyl-CoA acetyltransferase 1 antibody (KVAb00222). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Acetyl-CoA acetyltransferase 1 antibody (KVAb00222, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



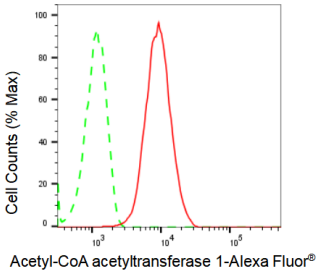
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using acetyl-CoA acetyltransferase 1 antibody (KVAb00222, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HT-1080 cells with Acetyl-CoA acetyltransferase 1 antibody (KVAb00222, 1:1,000) . Nuclei were stained blue with DAPI;Acetyl-CoA acetyltransferase 1 with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of Acetyl-CoA acetyltransferase 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Acetyl-CoA acetyltransferase 1 antibody (KVAb00222, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Acetyl-CoA acetyltransferase 1 expression in HepG2 cells using Acetyl-CoA acetyltransferase 1 antibody (KVAb00222, 1:2,000). Green, isotype control; red, Acetyl-CoA acetyltransferase 1.