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KD-Validated Anti-Acetyl-CoA acetyltransferase 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2343

Specification

KD-Validated Anti-Acetyl-CoA acetyltransferase 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P24752
Reactivity	**Rat, Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 45 kDa; Observed, 40 kDa KDa**
Gene Name	**ACAT1**
Aliases	**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**
Immunogen	**A synthesized peptide derived from human ACAT1**

KD-Validated Anti-Acetyl-CoA acetyltransferase 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID **38**

Other Names
Acetyl-CoA acetyltransferase, mitochondrial, 2.3.1.9 {ECO:0000255|PROSITE-ProRule:PRU10020, ECO:0000269|PubMed:1715688, ECO:0000269|PubMed:17371050, ECO:0000269|PubMed:7728148, ECO:0000269|PubMed:9744475}, Acetoacetyl-CoA thiolase, T2, ACAT1, ACAT, MAT

KD-Validated Anti-Acetyl-CoA acetyltransferase 1 Rabbit Monoclonal Antibody - 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:1715688, PubMed:7728148, PubMed: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, PubMed:7728148, PubMed: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). Thereby, it plays a major role in ketone body metabolism (PubMed:1715688, PubMed:17371050, PubMed:7728148, PubMed:9744475).

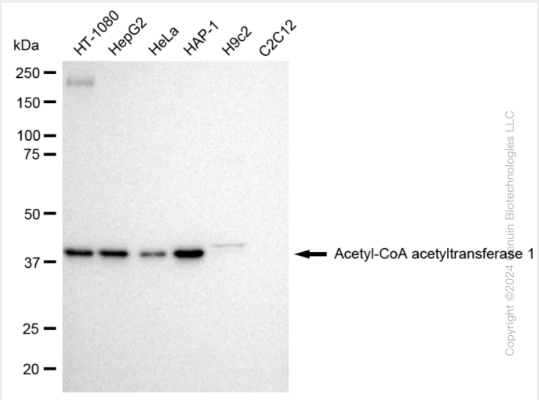
Cellular Location
Mitochondrion.

KD-Validated Anti-Acetyl-CoA acetyltransferase 1 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Acetyl-CoA acetyltransferase 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Acetyl-CoA acetyltransferase 1 antibody (Cat#AGI2343). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Acetyl-CoA acetyltransferase 1 antibody (Cat#AGI2343, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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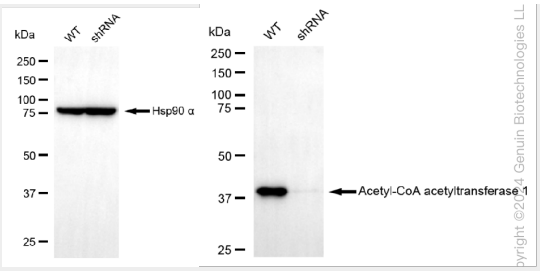
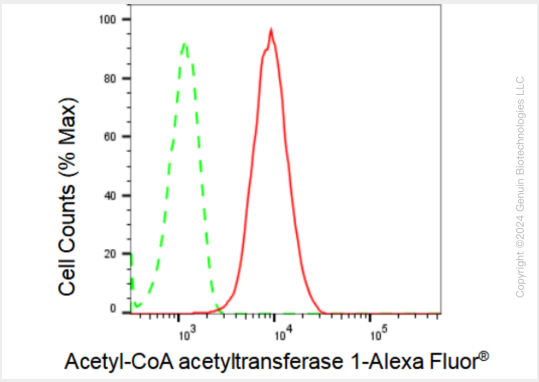
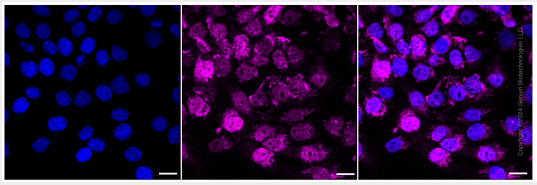


Western blotting analysis using anti-Acetyl-CoA acetyltransferase 1 antibody (Cat#AGI2343). Acetyl-CoA acetyltransferase 1 expression in wild type (WT) and acetyl-CoA acetyltransferase 1 shRNA knockdown (KD) Hela cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Acetyl-CoA acetyltransferase 1 antibody (Cat#AGI2343, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Acetyl-CoA acetyltransferase 1 expression in HepG2 cells using Acetyl-CoA acetyltransferase 1 antibody (Cat#AGI2343, 1:2,000). Green, isotype control; red, Acetyl-CoA acetyltransferase 1.



Immunocytochemical staining of HT-1080 cells with Acetyl-CoA acetyltransferase 1 antibody (Cat#AGI2343, 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.