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KD-Validated Anti-Acetyl-CoA acyltransfe rase 2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1304

Specification

KD-Validated Anti-Acetyl-CoA acyltransfe rase 2 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P42765
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 42 kDa , observed, 45 kDa KDa**
Gene Name	**ACAA2**
Aliases	**ACAA2; Acetyl-CoA Acyltransferase 2; DSAEC 2; Mitochondrial 3-Oxoacyl-Coenzyme A Thiolase 2; 3-Ketoacyl-CoA Thiolase, Mitochondrial; Mitochondrial 3-Oxoacyl-CoA Thiolase; Acetyl-Coenzyme A Acyltransferase 2; Acyl-CoA Hydrolase, Mitochondrial; Acetyl-CoA Acetyltransferase; EC 2.3.1.16; T1; Acetyl-CoA Acyltransferase; Beta Ketothiolase; Beta-Ketothiolase; EC 2.3.1.9; EC 3.1.2.-; EC 3.1.2.1; EC 3.1.2.2; EC 2.3.1**
Immunogen	**A synthesized peptide derived from human ACAA2**

KD-Validated Anti-Acetyl-CoA acyltransfe rase 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**10449**

Other Names
3-ketoacyl-CoA thiolase, mitochondrial, 2.3.1.16, Acetyl-CoA acetyltransferase, 2.3.1.9, Acetyl-CoA acyltransferase, Acyl-CoA hydrolase, mitochondrial, 3.1.2.-, 3.1.2.1, 3.1.2.2, Beta-ketothiolase, Mitochondrial 3-oxoacyl-CoA thiolase, T1, ACAA2

KD-Validated Anti-Acetyl-CoA acyltransfe rase 2 Rabbit Monoclonal Antibody - Protein Information

Name ACAA2

Function
In the production of energy from fats, 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 (Probable). Using free coenzyme A/CoA, catalyzes the thiolytic cleavage of medium- to long-chain unbranched 3-oxoacyl-CoAs into acetyl-CoA and a fatty acyl-CoA shortened by two

carbon atoms (Probable). Also catalyzes the condensation of two acetyl-CoA molecules into acetoacetyl-CoA and could be involved in the production of ketone bodies (Probable). Also displays hydrolase activity on various fatty acyl-CoAs (PubMed:25478839). Thereby, could be responsible for the production of acetate in a side reaction to beta-oxidation (Probable). Abolishes BNIP3-mediated apoptosis and mitochondrial damage (PubMed:18371312).

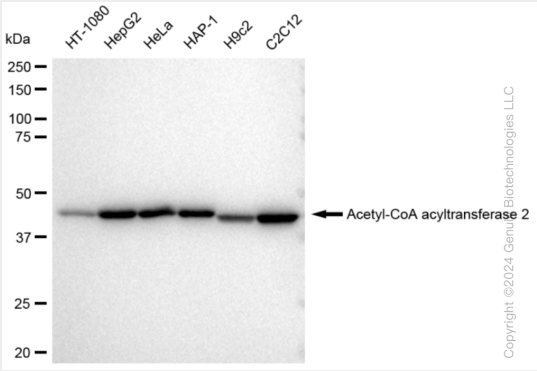
Cellular Location
Mitochondrion.

KD-Validated Anti-Acetyl-CoA acyltransfe rase 2 Rabbit Monoclonal Antibody - Protocols

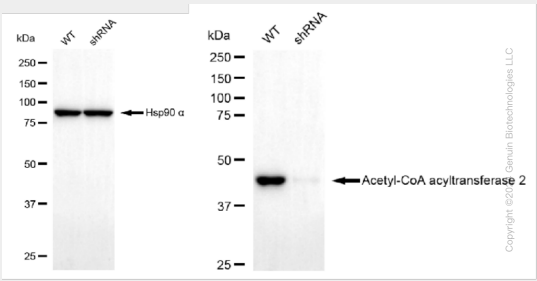
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-Acetyl-CoA acyltransfe rase 2 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Acetyl-CoA acyltransferase 2 antibody (Cat#AGI1304). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Acetyl-CoA acyltransferase 2 antibody (Cat#AGI1304, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Acetyl-CoA acyltransferase 2 antibody (Cat#AGI1304). Acetyl-CoA acyltransferase 2 expression in wild type (WT) and Acetyl-CoA acyltransferase 2 shRNA

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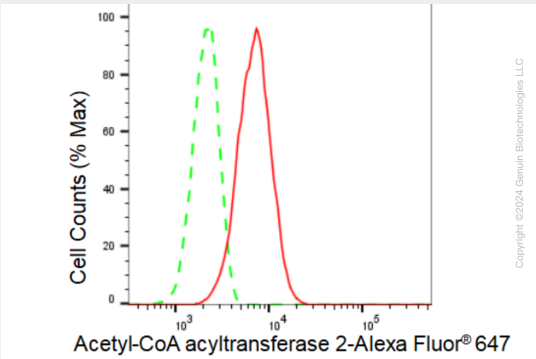
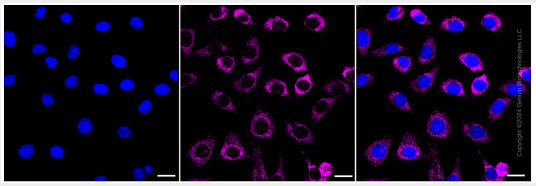
knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Acetyl-CoA acyltransferase 2 antibody (Cat#AGI1304, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Acetyl-CoA acyltransferase 2 expression in C2C12 cells using Acetyl-CoA acyltransferase 2 antibody (Cat#AGI1304, 1:2,000). Green, isotype control; red, Acetyl-CoA acyltransferase 2.



Immunocytochemical staining of C2C12 cells with Acetyl-CoA acyltransferase 2 antibody (Cat#AGI1304, 1:1,000). Nuclei were stained blue with DAPI; Acetyl-CoA acyltransferase 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.