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KD-Validated Anti-Acetyl-CoA carboxylase alpha Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1536

Specification

KD-Validated Anti-Acetyl-CoA carboxylase alpha Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q13085
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 266 kDa , observed, 266 kDa KDa**
Gene Name	**ACACA**
Aliases	**ACACA; Acetyl-CoA Carboxylase Alpha; ACC1; ACCA; Acetyl-Coenzyme A Carboxylase Alpha; Acetyl-CoA Carboxylase 1; ACC-Alpha; HACC1; ACAC; ACACalpha; ACCalpha; Acac1; ACC; EC 6.4.1.2; ACACALPHA; ACC-ALPHA; ACCALPHA; ACACAD; ACAC1**
Immunogen	**A synthesized peptide derived from human Acetyl Coenzyme A Carboxylase**

KD-Validated Anti-Acetyl-CoA carboxylase alpha Rabbit Monoclonal Antibody - Additional Information

Gene ID	**31**

Other Names
Acetyl-CoA carboxylase 1, ACC1, 6.4.1.2, Acetyl-Coenzyme A carboxylase alpha, ACC-alpha, ACACA (HGNC:84), ACAC, ACC1, ACCA

KD-Validated Anti-Acetyl-CoA carboxylase alpha Rabbit Monoclonal Antibody - Protein Information

Name ACACA (HGNC:84)

Synonyms ACAC, ACC1, ACCA

Function
Cytosolic enzyme that catalyzes the carboxylation of acetyl- CoA to malonyl-CoA, the first and rate-limiting step of de novo fatty acid biosynthesis (PubMed:20457939, PubMed:20952656, PubMed:29899443). This is a 2 steps reaction starting with the ATP-dependent carboxylation of the biotin carried by the biotin

carboxyl carrier (BCC) domain followed by the transfer of the carboxyl group from carboxylated biotin to acetyl-CoA (PubMed:20457939, PubMed:20952656, PubMed:29899443).

Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q5SWU9}

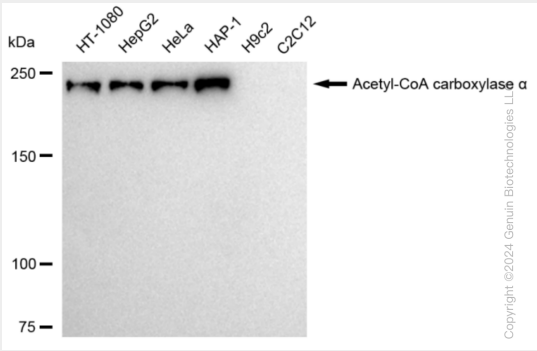
Tissue Location
Expressed in brain, placenta, skeletal muscle, renal, pancreatic and adipose tissues; expressed at low level in pulmonary tissue; not detected in the liver

KD-Validated Anti-Acetyl-CoA carboxylase alpha Rabbit Monoclonal Antibody - Protocols

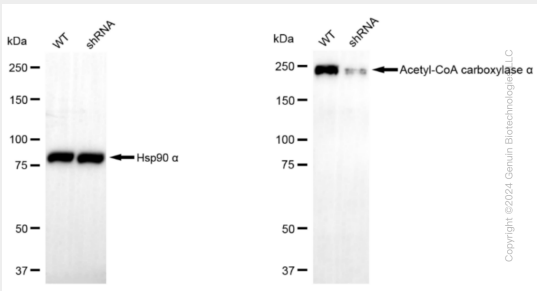
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-Acetyl-CoA carboxylase alpha Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Acetyl-CoA carboxylase alpha antibody (Cat#AGI1536). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Acetyl-CoA carboxylase alpha antibody (Cat#AGI1536, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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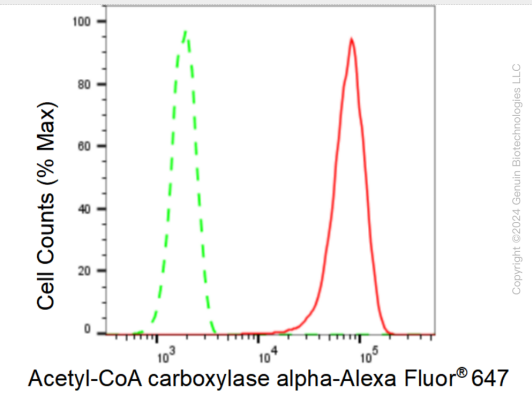
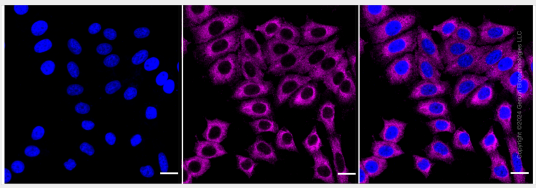
Western blotting analysis using anti-Acetyl-CoA carboxylase α antibody (Cat#AGI1536). Acetyl-CoA carboxylase α expression in wild type (WT) and Acetyl-CoA carboxylase α shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Acetyl-CoA carboxylase α antibody (Cat#AGI1536, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Acetyl-CoA carboxylase alpha expression in HepG2 cells using Acetyl-CoA carboxylase alpha antibody (Cat#AGI1536, 1:2,000). Green, isotype control; red, Acetyl-CoA carboxylase alpha.



Immunocytochemical staining of HepG2 cells with anti-Acetyl-CoA carboxylase alpha antibody (Cat#AGI1536, 1:1,000). Nuclei were stained blue with DAPI; Acetyl-CoA carboxylase alpha was stained magenta 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.