

ACAA2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10394

Specification

ACAA2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P13437</u> <u>EDL82881.1</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 41871

ACAA2 Antibody - Additional Information

Gene ID 170465

Positive Control Application & Usage Rat kidney tissue lysate Western Blot analysis (1-4 μg/ml). However, the optimal concentrations should be determined individually. Blocking peptide is available separately.

Other Names Peroxisomal 3-oxoacyl-CoA thiolase A

Target/Specificity ACAA2

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μ g (0.5 mg/ml) affinity purified rabbit anti-ACAA2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions



ACAA2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ACAA2 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:16476568). Thereby, could be responsible for the production of acetate in a side reaction to beta-oxidation (Probable). Abolishes BNIP3-mediated apoptosis and mitochondrial damage (By similarity).

Cellular Location Mitochondrion.

Tissue Location Expressed in liver, brown adipose tissue and heart (at protein level).

ACAA2 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
- <u>Cell Culture</u>

ACAA2 Antibody - Images





Western blot analysis of ACAA2 using rat kidney tissue lysate.

ACAA2 Antibody - Background

ACAA2 (acetylcoenzyme A acyltransferase 2), is member of the thiolase family of enzymes and is involved in lipid metabolism. ACAA2 is localized in the mitochondria. ACCA2 catalyzes the last conversion step of acetyl-CoA to 3-oxoacyl-CoA, in the fatty acid oxidation pathway.