

Basic Information

Product Name	Anti-ACC1/ACACA Antibody
Gene Name	ACACA
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ACACA.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	266 kDa
Dilution Ratios	Western blot (WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Acetyl-CoA carboxylase 1 also known as ACC-alpha or ACC α is an enzyme that in humans is encoded by the ACACA gene. Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. There are two ACC forms, alpha and beta, encoded by two different genes. ACC-alpha is highly enriched in lipogenic tissues. The enzyme is under long term control at the transcriptional and translational levels and under short term regulation by the phosphorylation/dephosphorylation of targeted serine residues and by allosteric transformation by citrate or palmitoyl-CoA. Multiple alternatively spliced transcript variants divergent in the 5' sequence and encoding distinct isoforms have been found for this gene.

Selected Validation Data

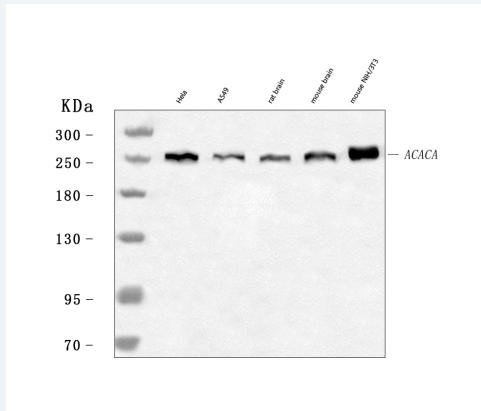


Figure 1. Western blot analysis of anti- ACACA antibody (A01802-2). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,

Lane 2: A549 whole cell lysates,

Lane 3: rat brain tissue lysates,

Lane 4: mouse brain tissue lysates,

Lane 5: mouse NIH/3T3 whole cell lysates.

Use rabbit anti- ACACA 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ACACA at approximately 266KD. The expected band size for ACACA is at 266KD.