

Acetyl Coenzyme A Carboxylase Antibody

Rabbit mAb Catalog # AP93216

Product Information

Application WB, IHC, IF, ICC, IHF

Primary Accession

Reactivity

Clonality

Q13085

Human

Monoclonal

Other Names ACAC; ACACA; ACC alpha; ACC1; ACCA; Acetyl Coenzyme A; Biotin carboxylase;

IsotypeRabbit IgGHostRabbitCalculated MW265554

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human Acetyl Coenzyme A Carboxylase **Description** Catalyzes the rate-limiting reaction in the biogenesis of long-chain fatty acids.

Carries out three functions: biotin carboxyl carrier protein, biotin carboxylase

and carboxyltransferase.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name ACACA (<u>HGNC:84</u>)

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: <u>20952656</u>, PubMed: <u>29899443</u>).

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

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