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Product datasheet for AP06366PU-M

ACAT1 (ACACA) Rabbit Polyclonal Antibody

Product data:

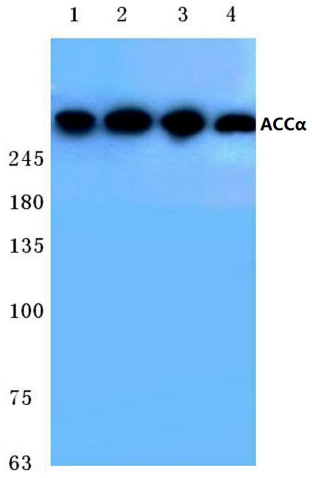
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	**Western Blot:** 1/500-1/1000. **Immunohistochemistry on paraffin sections:** 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 50-100 of Human ACCα. The immunogen sequence is around H74, total 14 AA.
Specificity:	This antibody detects endogenous levels of ACC1 protein.
Formulation:	PBS, pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 265 kDa
Gene Name:	acetyl-CoA carboxylase alpha
Database Link:	Entrez Gene 31 Human Q13085

View online »

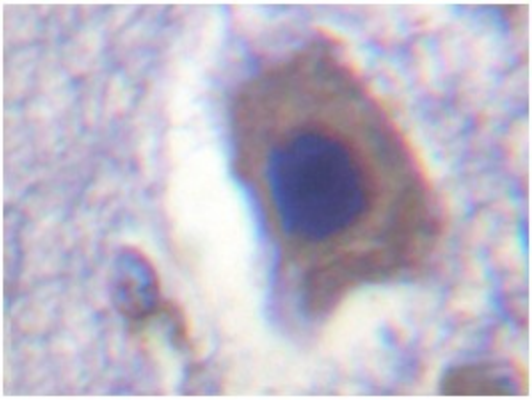
Background: Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the ratelimiting step in fatty acid synthesis. Exercise diminishes the activity of acetyl- CoA carboxylase in human muscle. ACCα (ACC1) is the rate-limiting enzyme in the biogenesis of long-chain fatty acids, and ACCβ (ACC2) may control mitochondrial fatty acid oxidation. These two isoforms of ACC control the amount of fatty acids in the cells. The catalytic function of ACCα is regulated by phosphorylation (inactive) and dephosphorylation (active) of targeted Serine residues and by allosteric transformation by citrate or palmitoyl-CoA, which serve as the short-term regulatory mechanism of the enzyme. The gene encoding ACCα, which maps to human chromosome 17, encodes the 265 kDa α form of ACC, which is the major ACC in lipogenic tissues. The catalytic core of ACCβ is homologous to that of ACCα except for an additional peptide of about 150 amino acids at the N-terminus.

Synonyms: ACACA, ACAC, ACC1, ACCA

Product images:



Western blot (WB) analysis of ACCa antibody antibody at 1/500 dilution Lane 1:Hela whole cell lysate Lane 2:Jurkat whole cell lysate Lane 3:NIH-3T3 whole cell lysate Lane 4:PC12 whole cell lysate



Immunohistochemistry (IHC) analyzes of ACC1 antibody in paraffin-embedded human skeletal muscle brain tissue.