

产品名称: ACC α Rabbit Polyclonal Antibody
产品货号: APRab06479



产品概述 (Summary)

产品名称 (Production Name)	ACC α Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ICC/IF,ELISA
种属反应性 (Reactivity)	Human,Mouse,Rat

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	ACACA
别名 (Alternative Names)	ACACA; ACAC; ACC1; ACCA; Acetyl-CoA carboxylase 1; ACC1; ACC-alpha
基因 ID (Gene ID)	31.0
蛋白 ID (SwissProt ID)	Q13085.The antiserum was produced against synthesized peptide derived from human ACC1. AA range:46-95

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
蛋白分子量 (Molecular Weight)	265kDa

研究背景 (Background)

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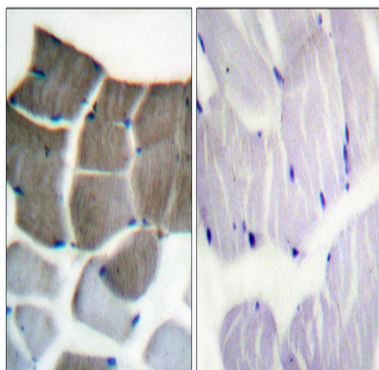


Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. There are two ACC forms, alpha and beta, encoded by two different genes. ACC-alpha 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. [provided by RefSeq, Jul 2008], catalytic activity: $\text{ATP} + \text{acetyl-CoA} + \text{HCO}_3^- = \text{ADP} + \text{phosphate} + \text{malonyl-CoA}$, catalytic activity: $\text{ATP} + \text{biotin-carboxyl-carrier protein} + \text{CO}_2 = \text{ADP} + \text{phosphate} + \text{carboxybiotin-carboxyl-carrier protein}$, cofactor: Binds 2 manganese ions per subunit, cofactor: Biotin, disease: Defects in ACACA are a cause of ACACA deficiency [MIM:200350]; also called ACAC or ACC deficiency. ACACA deficiency is an inborn error of de novo fatty acid synthesis. The disorder is associated with severe brain damage, persistent myopathy and poor growth, enzyme regulation: By phosphorylation, function: 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, online information: Acetyl-CoA carboxylase entry, pathway: Lipid metabolism; malonyl-CoA biosynthesis; malonyl-CoA from acetyl-CoA: step 1/1, PTM: Phosphorylation on Ser-1263 is required for interaction with BRCA1, similarity: Contains 1 ATP-grasp domain, similarity: Contains 1 biotin carboxylation domain, similarity: Contains 1 biotinyl-binding domain, similarity: Contains 1 carboxyltransferase domain, subunit: Interacts in its inactive phosphorylated form with the BRCT domains of BRCA1 which prevents ACACA dephosphorylation and inhibits lipid synthesis, tissue specificity: Expressed in brain, placental, skeletal muscle, renal, pancreatic and adipose tissues; expressed at low level in pulmonary tissue; not detected in the liver.

研究领域 (Research Area)

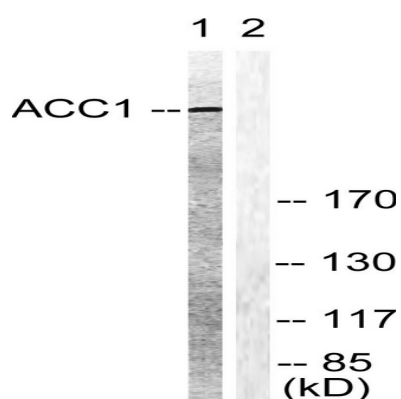
Fatty acid biosynthesis; Pyruvate metabolism; Propanoate metabolism; Insulin_Receptor;

图片 (Image Data)

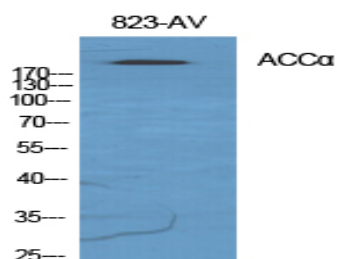


Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using ACC1 Antibody. The picture on the right is blocked with the synthesized peptide.

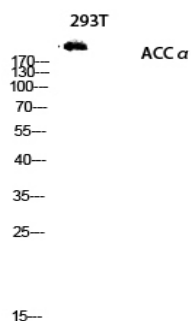
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Western blot analysis of lysates from NIH/3T3 cells, treated with PMA 125ng/ml 30', using ACC1 Antibody. The lane on the right is blocked with the synthesized peptide.

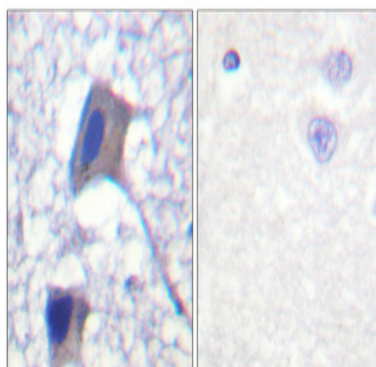


Western Blot analysis of various cells using ACC α Polyclonal Antibody diluted at 1: 1000



Western blot analysis of 293T lysis using ACC α antibody. Antibody was diluted at 1:1000

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Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

注意事项 (Note)

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