SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-Phospho-Acetyl Coenzyme A carboxylase alpha (Ser78) antibody

SL3036R

Product Name:	Phospho-Acetyl Coenzyme A carboxylase alpha (Ser78)
Chinese Name:	磷酸化乙酰辅酶A羧化酶抗体
Alias:	Acetyl Coenzyme A Carboxylase alpha (phospho S78); p-Acetyl Coenzyme A Carboxylase alpha (phospho S78); ACAC; ACACA; ACACA; ACACA_HUMAN; ACC alpha; ACC; ACC-alpha; ACC1; ACC1; ACCA; acetyl CoA carboxylase 1; acetyl Coenzyme A; Acetyl Coenzyme A; Biotin carboxylase; Acetyl-Coenzyme A Carboxylase alpha.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Pig,Horse,
Applications:	ELISA=1:500-1000IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	266kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Acetyl Coenzyme A carboxylase alpha around the phosphorylation site of Ser78:PA(p-S)HK
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:	PubMed
Product Detail:	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]. **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. **Subunit:** Monomer, homodimer, and homotetramer. Can form filamentous polymers. Interacts in its inactive phosphorylated form with the BRCT domains of BRCA1 which prevents ACACA dephosphorylation and inhibits lipid synthesis. Interacts with MID1IP1; interaction with MID1IP1 promotes oligomerization and increases its activity. **Subcellular Location:** Cytoplasm. **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. **Post-translational modifications:** Phosphorylation on Ser-1263 is required for interaction with BRCA1. **DISEASE:** Defects in ACACA are a cause of acetyl-CoA carboxylase 1 deficiency (ACACAD) [MIM:613933]; also known as ACAC deficiency or ACC deficiency. An inborn error of de novo fatty acid synthesis associated with severe brain damage, persistent myopathy and poor growth. **Similarity:** Contains 1 ATP-grasp domain. Contains 1 biotin carboxylation domain. Contains 1 biotinyl-binding domain. Contains 1 carboxyltransferase domain. **SWISS:**

	Q13085 **Gene ID:** 31 **Database links:** Entrez Gene: 31Human Entrez Gene: 32Human Omim: 200350Human SwissProt: O00763Human SwissProt: Q13085Human Unigene: 160556Human Unigene: 234898Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.