

Rabbit Anti-phospho-Acetyl Coenzyme A Carboxylase alpha (Ser80) antibody

SL12954R

Product Name:	phospho-Acetyl Coenzyme A Carboxylase alpha (Ser80)
Chinese Name:	磷酸化乙酰辅酶A羧化酶抗体
Alias:	Acetyl Coenzyme A Carboxylase alpha (phospho S80); p-Acetyl Coenzyme A Carboxylase alpha (phospho S80); 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, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800ICC=1:100-500IF=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:	265kDa
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 Ser80:SM(p-S)GL
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 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 20081. 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. Product Detail: 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.

SWISS:

Contains 1 carboxyltransferase domain. Contains 1 carboxyltransferase domain.

Q13085

Gene ID:

31

Database links:

Entrez Gene: 31 Human

Entrez Gene: 107476 Mouse

Entrez Gene: 60581Rat

Omim: 200350Human

SwissProt: Q13085Human

SwissProt: Q5SWU9Mouse

SwissProt: P11497Rat

Important Note:

d. cow This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.