

Anti-Acetyl CoA Carboxylase 1 (ACC1) Antibody [2G3] RT1015



Product Type:	Mouse monoclonal IgG2b, primary antibodies
Species reactivity:	Human
Applications:	WB, IP, IF
Molecular Wt:	265 kDa
Clone number:	2G3

Description: Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. Exercise diminishes the activity of acetyl-CoA carboxylase in human muscle. ACC α (ACC1) is the rate-limiting enzyme in the biogenesis of long-chain fatty acids, and ACC β (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 ACC α 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 enzyme's short-term regulatory mechanism. The gene encoding ACC α maps to human chromosome 17 and encodes a form of ACC, which is the major ACC in lipogenic tissues. The catalytic core of ACC β is homologous to that of the ACC α , except for an additional peptide of about 150 amino acids at the N-terminus.

Immunogen: peptide

Positive control: DU 145, Jurkat

Subcellular location: Cytoplasm

Database links: SwissProt: Q13085 Human

Recommended Dilutions:

WB	1:100-1:1,000
IP	1-2 μ g per 100-500 μ g of total protein
IF	1:50-500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4 $^{\circ}$ C

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Images

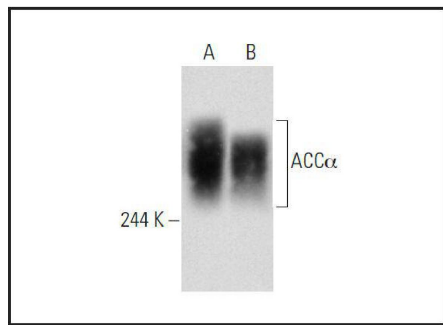


Fig1: Western blot analysis of ACC α expression in DU 145 (A) and Jurkat (B) whole cell lysates

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Liao, C.C., et al. 2014. The inhibition of oleic acid induced hepatic lipogenesis and the promotion of lipolysis by caffeic acid via up-regulation of AMP-activated kinase. *J. Sci. Food Agric.* 94: 1154-1162.
2. Liao, C.C., et al. 2013. Prevention of diet-induced hyperlipidemia and obesity by caffeic acid in C57BL/6 mice through regulation of hepatic lipogenesis gene expression. *J. Agric. Food Chem.* 61: 11082-11088.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn