Human Acetyl-CoA carboxylase 1 (ACACA) ELISA Kit

Catalog No: #EK7635

Package Size: #EK7635-1 48T #EK7635-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Human Acetyl-CoA carboxylase 1 (ACACA) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	ACAC; ACC; ACC1; ACCA; ACC-alpha|acetyl-CoA carboxylase 1|acetyl-CoA carboxylase-alpha
Accession No.	Q13085
Uniprot	Q13085
GeneID	31;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:3.12-200 ng/mL

Sensitivity:1.09 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate ACACA in samples. An antibody specific for ACACA has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyACACA present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACACA is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of ACACA bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Acetyl-CoA carboxylase (ACC) is a biotin-dependent enzyme that catalyzes the irreversible carboxylation of acetyl-CoA to produce malonyl-CoA through its two catalytic activities, biotin carboxylase (BC) and carboxyltransferase (CT). ACC is a multi-subunit enzyme in most prokaryotes and in the chloroplasts of most plants and algae, whereas it is a large, multi-domain enzyme in the endoplasmic reticulum of most eukaryotes. The most important function of ACC is to provide the malonyl-CoA substrate for the biosynthesis of fatty acids. The activity of ACC can be controlled at the transcriptional level as well as by small molecule modulators and covalent modification. The human genome contains the genes for two different ACCs ACACA and ACACB. In muscle cells, malonyl-CoA inhibits beta-oxidation.

Note: This product is for in vitro research use only