

Mouse Acetyl-CoA acetyltransferase, mitochondrial (ACAT1) ELISA Kit



Catalog No: #EK7640

Orders: order@signalwayantibody.com

Package Size: #EK7640-1 48T #EK7640-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Mouse Acetyl-CoA acetyltransferase, mitochondrial (ACAT1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	ACAT; MAT; T2; THIL; acetoacetyl Coenzyme A thiolase mitochondrial acetoacetyl-CoA thiolase
Accession No.	Q8QZT1
Uniprot	Q8QZT1
GeneID	110446;
Storage	<p>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.</p> <p>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).</p>

Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.055 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 ACAT1 in samples. An antibody specific for ACAT1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyACAT1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACAT1 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 ACAT1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**ACAT1 is a mitochondrially localized enzyme that catalyzes the reversible formation of acetoacetyl-CoA from two molecules of acetyl-CoA. Defects in this gene are associated with 3-ketothiolase deficiency, an inborn error of isoleucine catabolism characterized by urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, tiglylglycine, and butanone.The 427-amino acid precursor had a molecular mass of 45.2 kD. The sequence included a 33-residue leader peptide and a 394-amino acid subunit of the mature enzyme, which had a molecular mass of 41.4 kD. In all 4 cell lines, the T2 mRNA had the same 1.7-kb transcript as that of the control; however, content was reduced in 2 cell lines and normal in the other 2. Human T2 is a homotetramer of 41-kD subunits.

Note: This product is for in vitro research use only