

Mouse Long-chain specific acyl-CoA dehydrogenase, mitochondrial (ACADL) ELISA Kit

Catalog No: #EK7636

Orders: order@signalwayantibody.com

Package Size: #EK7636-1 48T #EK7636-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Mouse Long-chain specific acyl-CoA dehydrogenase, mitochondrial (ACADL) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	ACAD4; FLJ94052; LCAD; long-chain acyl-CoA dehydrogenase
Accession No.	P51174
Uniprot	P51174
GeneID	11363;
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:6.25-400 pg/mL

Sensitivity:1.56 pg/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 ACADL in samples. An antibody specific for ACADL has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyACADL present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACADL 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 ACADL bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**ACADL is a protein belongs to the acyl-CoA dehydrogenase family, which is a family of mitochondrial flavoenzymes involved in fatty acid and branched chain amino-acid metabolism. This protein is one of the four enzymes that catalyze the initial step of mitochondrial beta-oxidation of straight-chain fatty acid. Defects in this gene are the cause of long-chain acyl-CoA dehydrogenase (LCAD) deficiency, leading to nonketotic hypoglycemia.

Impaired ACADL activity results in non-ketotic hypoglycemia, hypotonia, muscle weakness and episodes of cardiorespiratory arrest associated with fasting. A number of straight-chain acyl-CoA dehydrogenases of different substrate specificities are present in mammalian tissues.

Note: This product is for in vitro research use only