Human Long-chain-fatty-acid--CoA ligase 1 (ACSL1) ELISA Kit

Catalog No: #EK7667

Package Size: #EK7667-1 48T #EK7667-2 96T

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

Description

Product Name	Human Long-chain-fatty-acid--CoA ligase 1 (ACSL1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	ACS1; FACL1; FACL2; LACS; LACS1; LACS2; fatty-acid-Coenzyme A ligase; long-chain 1|fatty-acid-Coenzyme A ligase; long-chain 2|lignoceroyl-CoA synthase|long-chain acyl-CoA synthetase 1|long-chain acy
Accession No.	P33121
Uniprot	P33121
GeneID	2180;
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:31.25-2000 pg/mL

Sensitivity:7.8 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 ACSL1 in samples. An antibody specific for ACSL1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyACSL1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACSL1 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 ACSL1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Long-chain-fatty-acid--CoA ligase 1 is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation.
In melanocytic cells ACSL1 gene expression may be regulated by MITF.Activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Preferentially uses palmitoleate, oleate and linoleate. Highly expressed in liver, heart, skeletal muscle, kidney and

erythroid cells, and to a lesser extent in brain, lung, placenta and pancreas.

Note: This product is for in vitro research use only