Product Datasheet

Human Large neutral amino acids transporter small subunit 1 (SLC7A5) ELISA Kit



Catalog No: #EK7250

Package Size: #EK7250-1 48T #EK7250-2 96T

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

Description

Product Name	Human Large neutral amino acids transporter small subunit 1 (SLC7A5) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	4F2LC; CD98; D16S469E; E16; LAT1; MPE16; hLAT1; 4F2 light chain CD98 light chain L-type amino acid
	transporter 1 integral membrane protein E16 large neutral amino acids transporter 1 large neutral a
Accession No.	Q01650
Uniprot	Q01650
GeneID	8140;
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:0.156-10 ng/mL
Sensitivity:0.058 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 SLC7A5 in samples. An antibody specific for SLC7A5 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC7A5 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC7A5 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 SLC7A5 bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview:LAT1 is a heterodimeric membrane transport protein that preferentially transports neutral branched (valine, leucine, isoleucine) and aromatic (tryptophan, tyrosine) amino acids. LAT is highly expressed in brain capillaries (which form the blood brain barrier) relative to other tissues. CD98 is a glycoprotein that comprises the light subunit of the Large neutral Amino acid Transporter (LAT1).

Kanai et al. (1998) used expression cloning to isolate a rat cDNA termed LAT1. They showed that LAT1 encoded a protein necessary for system L amino acid transport, thought to be a major route by which cells import large neutral amino acids with branched or aromatic side chains.

Note: This product is for in vitro research use only