Human Y+L amino acid transporter 1 (SLC7A7) ELISA Kit

Catalog No: #EK7249

Package Size: #EK7249-1 48T #EK7249-2 96T

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Description

Product Name	Human Y+L amino acid transporter 1 (SLC7A7) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	LAT3; LPI; MOP-2; Y+LAT1; y+LAT-1; OTTHUMP00000164494|monocyte amino acid permease 2|solute carrier family 7 member 7|y(+)L-type amino acid transporter 1
Accession No.	Q9UM01
Uniprot	Q9UM01
GeneID	9056;
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:0.312-20 ng/mL

Sensitivity:0.114 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 SLC7A7 in samples. An antibody specific for SLC7A7 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC7A7 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC7A7 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 SLC7A7 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The SLC7A7 gene encodes the light subunit of a cationic amino acid transporter. Together with the heavy chain, 4F2hc (SLC3A2), the SLC7A7 protein forms a functional heterodimeric transporter on the basolateral cell membrane of epithelial cells that transfers lysine, arginine, and ornithine from the cell to the extracellular space The SLC7A7 gene encodes a deduced 511-residue protein with a molecular mass of 56 kD that contains 12 transmembrane domains. The protein sequence shows 81% homology to the opossum protein. Northern blot analysis identified a 2.4-kb mRNA transcript expressed in kidney, peripheral blood leukocytes, lung, placenta, spleen, and small intestine. SLC7A7 associated with SLC3A2 to form a functional 135-kD heterodimer linked by a disulfide bridge involving cysteine 109 of SLC3A2.

Note: This product is for in vitro research use only