Human Excitatory amino acid transporter 5 (SLC1A7) ELISA Kit

Catalog No: #EK7293

Package Size: #EK7293-1 48T #EK7293-2 96T

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

Description

Product Name	Human Excitatory amino acid transporter 5 (SLC1A7) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	AAAT; EAAT5; FLJ36602; excitatory amino acid transporter 5 (retinal glutamate transporter)
Accession No.	O00341
Uniprot	O00341
GeneID	6512;
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:0.122 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 SLC1A7 in samples. An antibody specific for SLC1A7 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC1A7 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC1A7 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 SLC1A7 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:EAAT5-mediated L-glutamate uptake was sodium- and voltage-dependent and chloride-independent. Transporter currents elicited by glutamate were also sodium- and voltage-dependent, but ion substitution experiments suggested that this current was largely carried by chloride ions.Although EAAT5 shares the structural homologies of the EAAT family, 1 novel feature of the EAAT5 sequence is a C-terminal motif previously identified in N-methyl-D-aspartate receptors and potassium channels and shown to confer interactions with a family of synaptic proteins that promote ion channel clustering. EAAT5 has 46% amino acid sequence identity with EAAT1 (SLC1A3), 43% identity with EAAT4 (SLC1A6), 37% identity with EAAT3 (SLC1A1), and 36% identity with EAAT2 (SLC1A2).

Note: This product is for in vitro research use only