

Rat Excitatory amino acid transporter 2 (SLC1A2) ELISA Kit



Catalog No: #EK7298

Orders: order@signalwayantibody.com

Package Size: #EK7298-1 48T #EK7298-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Rat Excitatory amino acid transporter 2 (SLC1A2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	EAAT2; GLT-1; excitatory amino acid transporter 2 excitotoxic amino acid transporter 2 glial high affinity glutamate transporter glutamate/aspartate transporter III sodium-dependent glutamate/aspartate
Accession No.	P31596
Uniprot	P31596
GeneID	29482;
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:0.057 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:Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate SLC1A2 in samples. An antibody specific for SLC1A2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any SLC1A2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC1A2 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 SLC1A2 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:SLC1A2 / EAAT2 is a member of a family of the solute carrier family of proteins. The membrane-bound protein is the principal transporter that clears the excitatory neurotransmitter glutamate from the extracellular space at synapses in the central nervous system. Glutamate clearance is necessary for proper synaptic activation and to prevent neuronal damage from excessive activation of glutamate receptors.

Ceftriaxone, an antibiotic, has been shown to induce/enhance the expression of EAAT2, resulting in reduced glutamate activity. Ceftriaxone has been shown to reduce the development and expression of tolerance to opiates and other drugs of abuse. EAAT2 may possess an important role in modulating drug addiction and tolerance.

Note: This product is for in vitro research use only