



EAAT3 Polyclonal Antibody

Catalog No	YP-Ab-12719
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	SLC1A1
Protein Name	Excitatory amino acid transporter 3
Immunogen	The antiserum was produced against synthesized peptide derived from human EAAT3. AA range:122-171
Specificity	EAAT3 Polyclonal Antibody detects endogenous levels of EAAT3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SLC1A1; EAAC1; EAAT3; Excitatory amino acid transporter 3; Excitatory amino-acid carrier 1; Neuronal and epithelial glutamate transporter; Sodium-dependent glutamate/aspartate transporter 3; Solute carrier family 1 member 1
Observed Band	57kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Apical cell membrane ; Multi-pass membrane protein . Cell junction, synapse, synaptosome . Early endosome membrane . Late endosome membrane . Recycling endosome membrane .
Tissue Specificity	Expressed in all tissues tested including liver, muscle, testis, ovary, retinoblastoma cell line, neurons and brain (in which there was dense expression in substantia nigra, red nucleus, hippocampus and in cerebral cortical layers).
Function	disease:Defects in SLC1A1 may be a cause of dicarboxylicamino aciduria [MIM:222730]; also known as glutamate-aspartate transport defect. This is as defect in renal and probably intestinal transport of glutamic and aspartic acids and is associated with moderate hyperprolinemia.,function:Transports L-glutamate and also L- and D-aspartate. Essential for terminating the postsynaptic action of glutamate by rapidly removing released glutamate from the synaptic cleft. Acts as a symport by cotransporting sodium. Negatively regulated by ARL6IP5.,PTM:Glycosylated.,similarity:Belongs to the sodium:dicarboxylate

(SDF) symporter (TC 2.A.23) family.,subunit:Interacts with ARL6IP5/PRAF3.,tissue specificity:Expressed in all tissues tested including liver, muscle, testis, ovary, retinoblastoma cell line, neurons and brain (in which there was dense expression in substantia nigra, red nucleus, hippocampus

Background

This gene encodes a member of the high-affinity glutamate transporters that play an essential role in transporting glutamate across plasma membranes. In brain, these transporters are crucial in terminating the postsynaptic action of the neurotransmitter glutamate, and in maintaining extracellular glutamate concentrations below neurotoxic levels. This transporter also transports aspartate, and mutations in this gene are thought to cause dicarboxylicamino aciduria, also known as glutamate-aspartate transport defect. [provided by RefSeq, Mar 2010],

matters needing attention

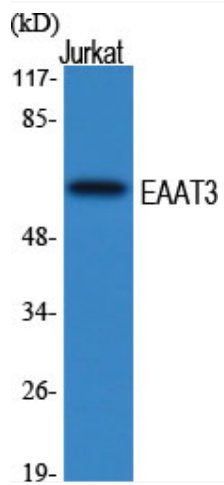
Avoid repeated freezing and thawing!

Usage suggestions

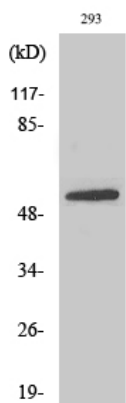
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



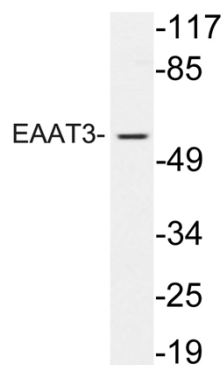
Products Images



Western Blot analysis of various cells using EAAT3 Polyclonal Antibody



Western Blot analysis of 293 cells using EAAT3 Polyclonal Antibody



Western blot analysis of lysate from 293 cells treated with EGF, using EAAT3 antibody.