

Product name:	Glutamate Transporter neuronal (EAAC1/EAAT3)
Cat number:	ABN10266
Conjugate:	Unconjugated
Size:	100 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human EAAT3. AA range:122-171
Reactivity:	Hu, Ms, Rt
Applications:	WB, ELISA
Molecular Weight:	57kDa
Purification:	Aff. Pur.
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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],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 and in cerebral cortical layers),.