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Rabbit Anti-EAAT4 antibody

SL13046R

Product Name:	EAAT4
Chinese Name:	胶质细胞谷氨酸运载蛋白4抗体
Alias:	Excitatory amino acid transporter 4; SLC1A6; High affinity neuronal glutamate transporter; MGC33092; MGC43671; Sodium dependent glutamate/aspartate transporter; Solute carrier family 1 (high affinity aspartate/glutamate transporter) member 6; Solute carrier family 1 member 6;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	62kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human EAAT4:151-250/564<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Excitatory Amino Acid Transporters (EAATs) are membrane-bound proteins that are localized in glial cells and pre-synaptic glutamatergic nerve endings. EAATs transport the excitatory neurotransmitters L-glutamate and D-aspartate, a process that is essential

for terminating the postsynaptic action of glutamate. The re-uptake of amino acid neurotransmitters by EAAT proteins has been shown to protect neurons from excitotoxicity, which is caused by the accumulation of amino acid neurotransmitters. EAAT4 is an aspartate/glutamate transporter that is expressed predominantly in the cerebellum. The transport activity encoded by EAAT4 has high apparent affinity for L-aspartate and L-glutamate, and has a pharmacologic profile consistent with previously described cerebellar transport activities. EAAT5 is a glutamate transporter coupled to a chloride conductance which is expressed primarily in retina. Although EAAT5 shares the structural homologies of the EAAT family, a novel feature of the EAAT5 sequence is a carboxy-terminal motif previously identified in N-ethyl-D-aspartate receptors and potassium channels and shown to confer interactions with a family of synaptic proteins that promote ion channel clustering.

Function:
EAAT4 is expressed predominantly in the cerebellum (Purkinje cells) and weakly in the forebrain, where it transports L-glutamate, L-aspartate and D-aspartate, acting as a symport by cotransporting sodium. EAAT4 may function as a combined transporter and inhibitory glutamate receptor and also functions as an anion-selective ion channel.

Subcellular Location:
Membrane; multi-pass membrane protein.

Tissue Specificity:
Brain. Expressed densely and selectively incell bodies of Purkinje cells.

Similarity:
Belongs to the sodium:dicarboxylate (SDF) symporter(TC 2.A.23) family. SLC1A6 subfamily.

SWISS:
P48664

Gene ID:
6511

Database links:

Entrez Gene: 6511 Human

Entrez Gene: 20513 Mouse

Entrez Gene: 84012 Rat

Omim: 600637 Human

SwissProt: P48664 Human

	SwissProt: O35544 Mouse SwissProt: O35921 Rat Unigene: 10827 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.