

EAAT2 Polyclonal Antibody

Store at -20°C

Catalog Number: A16614

Pub. No. MAN0009190 Rev. 1.00

Clonality: Polyclonal

Amount: 100 µL

Host/Class: Rabbit

Reactivity: Human EAAT2

Species Reactivity: Mouse, Rat

Product Description

Glutamate is the major excitatory neurotransmitter in the mammalian central nervous system. Excitatory amino acid transporters (EAATs) regulate and maintain extracellular glutamate concentrations below excitotoxic levels. In addition, glutamate transporters may limit the duration of synaptic excitation by an electrogenic process in which the transmitter is co-transported with three sodium ions and one proton, followed by countertransport of a potassium ion. Five EAATs (EAAT1-5) are characterized: EAAT2 (GLT-1) is primarily expressed in astrocytes but is also expressed in neurons of the retina and during fetal development (1). Homozygous EAAT2 knockout mice have spontaneous, lethal seizures and an increased predisposition to acute cortical injury (2). PKC phosphorylates Ser113 of EAAT2 and coincides with glutamate transport (3).

Product Specifications

Immunogen:	A synthetic peptide corresponding to human EAAT2
Predicted Reactivity:	Human
Alternate Names:	GLT1
Apparent MW:	65 kDa
Gene ID:	6506
Protein Accession No.:	P43004
Lot:	See product label

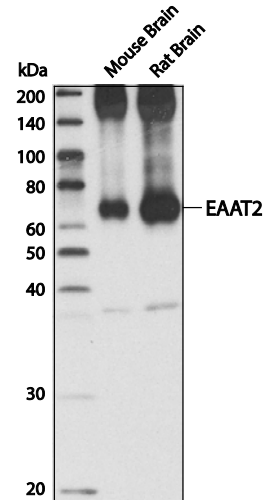


Figure 1 Western blot analysis of extracts from mouse and rat brain using EAAT2 Polyclonal Antibody.

Product Applications

Applications reported for this antibody include western blot, and immunofluorescence (frozen).

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Application	Recommended Dilution
Western blotting	1:1000
Immunofluorescence (frozen)	1:100

Storage and Handling

Store reagents at -20°C. Avoid repeated freezing and thawing. Do not aliquot the antibody.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage Buffer

10 mM sodium HEPES (pH 7.5), 150 nM NaCl, 100 µg/mL BSA, 50% glycerol.

For research use only. Not for use in diagnostic procedures

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

References

1. Amara, S.G. and Fontana, A.C. (2002) *Neurochem Int* 41, 313-8.
2. Tanaka, K. et al. (1997) *Science* 276, 1699-702.
3. Casado, M. et al. (1993) *J Biol Chem* 268, 27313-7.

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Limited Product Warranty

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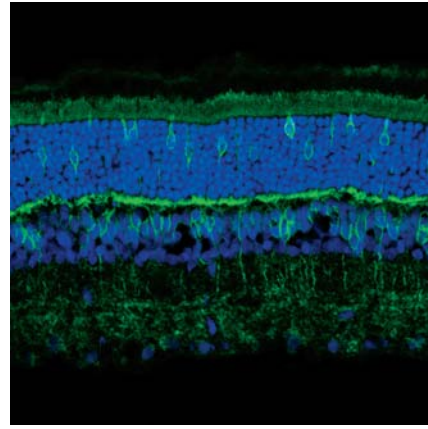









Figure 2 Confocal immunofluorescent analysis of rat retina using EAAT2 Polyclonal Antibody (green). A fluorescent DNA dye was used to produce the blue pseudocolor.

Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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