

Excitatory Amino Acid Transporter 1 Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 90014 (clone 2G7C2)
Format: 100ug, Protein A-purified, lyophilized, 0.1M Tris, 0.1M glycine, 2% sucrose, 1mg/ml.

BACKGROUND

Excitatory amino-acid transporters (EAATs), also known as glutamate transporters, belong to the family of neurotransmitter transporters. EAATs serve to terminate the excitatory signal by removal of glutamate from the neuronal synapse into neuroglia and neurons. After glutamate is released as the result of an action potential, glutamate transporters quickly remove it from the extracellular space to keep its levels low, thereby terminating the synaptic transmission. The activity of glutamate transporters also allows glutamate to be recycled for repeated release. Glutamate transporters also transport aspartate and are present in virtually all peripheral tissue. They exhibit stereoselectivity for L-glutamate but transport both L- and D-aspartate.

SPECIFICATION SUMMARY

Antigen: Synthetic peptide derived from the C-terminal domain of rat EAAT1. Accession no. P24942.
Host species: Mouse.
Antibody Class: IgG1.
Preservative: None.

SPECIFICITY

This antibody reacts with rat EAAT1 protein. Cross-reactivity with human and mouse EAAT1 is predicted based on sequence homology.

APPLICATIONS

ELISA: use at 0.1-2ug/ml.
Immunoblotting: use at 1-5ug/ml. A band of ~60kDa is detected.
Immunohistochemistry: Use at 2-10ug/ml.
These are recommended concentrations. Enduser should determine optimal concentrations for their applications.

RECONSTITUTION

Reconstitute in distilled water.

STORAGE AND STABILITY

This product is stable for at least one (1) year at -20°C to -70°C. Reconstituted product should be stored in appropriate aliquots to avoid repeated freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.