

EAAT2 (12G19) Rabbit Monoclonal Antibody

EAAT2 (12G19) Rabbit Monoclonal Antibody Catalog # AP93831

Specification

EAAT2 (12G19) Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Calculated MW WB, IHC, IP P43006 Rat, Mouse Monoclonal 62030

EAAT2 (12G19) Rabbit Monoclonal Antibody - Additional Information

Gene ID 20511

Other Names Excitatory amino acid transporter 2, GLT-1, Sodium-dependent glutamate/aspartate transporter 2, Solute carrier family 1 member 2, Slc1a2, Eaat2, Glt1

Dilution WB~~1:1000 IHC~~1:100~500 IP~~N/A

Storage Conditions -20°C

EAAT2 (12G19) Rabbit Monoclonal Antibody - Protein Information

Name Slc1a2

Synonyms Eaat2, Glt1

Function

Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:7557442, PubMed:7698742, PubMed:9373176). Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion. Mediates Cl(-) flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na(+) symport (By similarity). Essential for the rapid removal of released glutamate from the synaptic cleft, and for terminating the postsynaptic action of glutamate (PubMed:9180080).

Cellular Location



Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P43004}

Tissue Location

Detected in brain (PubMed:9180080). Detected in embryonic forebrain, especially in globus pallidus, perirhinal cortex, lateral hypothalamus, hippocampus, and on fimbria and axonal pathways connecting the neocortex, basal ganglia and thalamus (at protein level) (PubMed:16880397). Isoform GLT1 is expressed in the brain (PubMed:7557442, PubMed:7698742, PubMed:9180080, PubMed:9373176) Isoforms GLT-1A and GLT-1B are expressed in the liver (PubMed:9373176)

EAAT2 (12G19) Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

EAAT2 (12G19) Rabbit Monoclonal Antibody - Images



Western blot analysis of extracts from Mouse brain tissue using AP93831 at 1:3000. EAAT2 (12G19) Rabbit Monoclonal Antibody - Background

Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:7698742, PubMed:7557442, PubMed:9373176). Functions as a symporter that transports one amino acid molecule together with two or three Na+ ions and one proton, in parallel with the counter-transport of one K+ ion. Mediates Cl- flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na+ symport (By similarity). Essential for the rapid removal of released glutamate from the synaptic cleft, and for terminating the postsynaptic action of glutamate (PubMed:9180080).