

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain)
Rabbit Polyclonal Antibody
Catalog # ALS11109**Specification**

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - Product Information

Application	IHC
Primary Accession	P43003
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60kDa KDa

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - Additional Information**Gene ID** 6507**Other Names**

Excitatory amino acid transporter 1, Sodium-dependent glutamate/aspartate transporter 1, GLAST-1, Solute carrier family 1 member 3, SLC1A3, EAAT1, GLAST, GLAST1

Target/Specificity

Human SLC1A3 / GLAST. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - Protein Information**Name** SLC1A3 ([HGNC:10941](#))**Function**

Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:[20477940](http://www.uniprot.org/citations/20477940), PubMed:[26690923](http://www.uniprot.org/citations/26690923), PubMed:[28032905](http://www.uniprot.org/citations/28032905), PubMed:[28424515](http://www.uniprot.org/citations/28424515), PubMed:[7521911](http://www.uniprot.org/citations/7521911), PubMed:[8123008](http://www.uniprot.org/citations/8123008)). 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 (PubMed:[20477940](http://www.uniprot.org/citations/20477940)). Mediates

Cl(-) flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na(+) symport (PubMed:20477940). Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

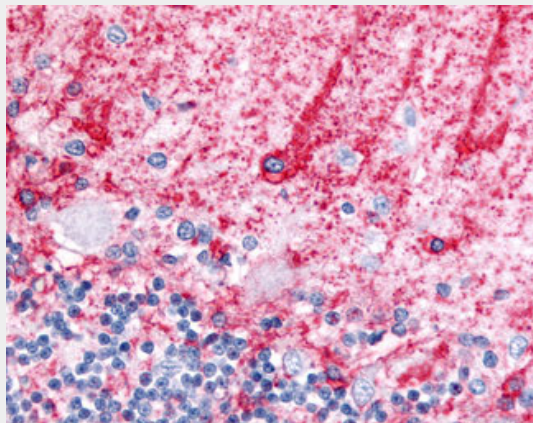
Tissue Location

Detected in brain (PubMed:7521911, PubMed:8123008, PubMed:8218410). Detected at very much lower levels in heart, lung, placenta and skeletal muscle (PubMed:7521911, PubMed:8123008). Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia (PubMed:7521911).

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - Images

Anti-SLC1A3 / GLAST antibody ALS11109 IHC of human brain, cerebellum, molecular layer and...

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - Background

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.

SLC1A3 / EAAT1 Antibody (Cytoplasmic Domain) - References

Shashidharan P., et al. Biochim. Biophys. Acta 1216:161-164(1993).

Arriza J.L.,et al.J. Neurosci. 14:5559-5569(1994).
Kawakami H.,et al.Biochem. Biophys. Res. Commun. 199:171-176(1994).
Stoffel W.,et al.FEBS Lett. 386:189-193(1996).
Vallejo-Illarramendi A.,et al.J. Neurochem. 95:341-348(2005).