

SLC1A3 Antibody (N-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22259a**Specification**

SLC1A3 Antibody (N-Term) - Product Information

Application	WB,E
Primary Accession	P43003
Other Accession	P46411
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	59572

SLC1A3 Antibody (N-Term) - 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

This SLC1A3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 127-161 amino acids from human SLC1A3.

Dilution

WB~~1:8000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SLC1A3 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC1A3 Antibody (N-Term) - 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:[7521911](#), PubMed:[8123008](#), PubMed:[20477940](#), PubMed:[26690923](#), PubMed:[28032905](#), PubMed:[28424515](#)). 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](#)). 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

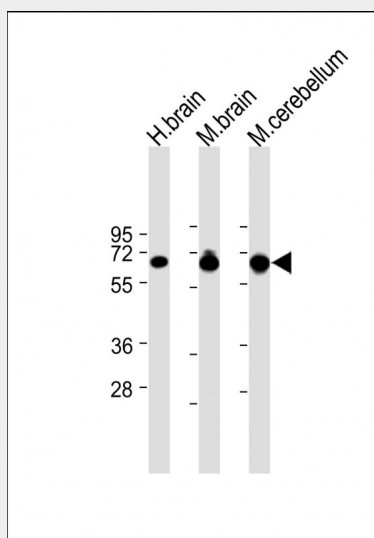
Detected in brain (PubMed:[8218410](#), PubMed:[7521911](#), PubMed:[8123008](#)). Detected at very much lower levels in heart, lung, placenta and skeletal muscle (PubMed:[7521911](#), PubMed:[8123008](#)). Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia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

SLC1A3 Antibody (N-Term) - 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 Antibody (N-Term) - Images



All lanes : Anti-SLC1A3 Antibody (N-Term) at 1:8000 dilution Lane 1: Human brain lysate Lane 2: Mouse brain lysate Lane 3: Mouse cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SLC1A3 Antibody (N-Term) - 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 Antibody (N-Term) - 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).