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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
E~~Use at an assay dependent concentration.

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:20477940, PubMed:26690923, PubMed:28032905, PubMed:28424515, PubMed:7521911, PubMed: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). 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

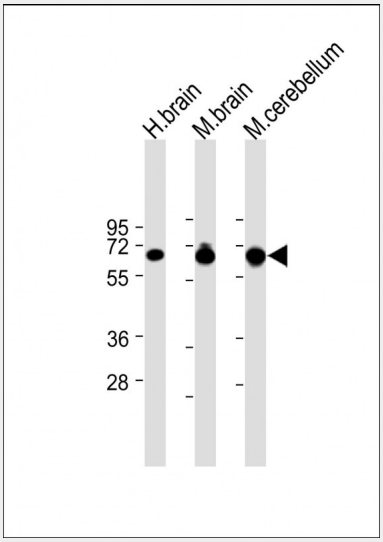
Tissue Location
Detected in brain (PubMed:7521911, PubMed:8123008, PubMed:8218410). Detected at very much lower levels in heart, lung, placenta and skeletal muscle (PubMed:7521911, PubMed:8123008). Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia (PubMed:7521911).

SLC1A3 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 Cytomety
- 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

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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).
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