

SLC1A3 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP14593b

Specification

SLC1A3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P43003

SLC1A3 Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC1A3 Antibody (C-term) Blocking Peptide - 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

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

href="http://www.uniprot.org/citations/20477940" target="_blank">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 (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

SLC1A3 Antibody (C-term) Blocking Peptide - Images

SLC1A3 Antibody (C-term) Blocking Peptide - Background

This gene encodes a member of a member of a high affinity glutamate transporter family. Mutations in this gene are associated with episodic ataxia, Type 6. Alternative splicing results inmultiple transcript variants.

SLC1A3 Antibody (C-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Guilmatre, A., et al. Arch. Gen. Psychiatry 66(9):947-956(2009)Elia, J., et al. Psychiatr. Genet. 19(3):134-141(2009)Sarac, S., et al. APMIS 117(4):291-301(2009)