

SLC38A5 Antibody (N-term) Blocking peptide Synthetic peptide Catalog # BP14098a

Specification

SLC38A5 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>Q8WUX1</u>

SLC38A5 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 92745

Other Names

Sodium-coupled neutral amino acid transporter 5, Solute carrier family 38 member 5, System N transporter 2, SLC38A5, JM24, SN2, SNAT5

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP14098a was selected from the N-term region of SLC38A5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SLC38A5 Antibody (N-term) Blocking peptide - Protein Information

Name SLC38A5

Synonyms JM24, SN2 {ECO:0000303|PubMed:11243884},

Function

Symporter that cotransports neutral amino acids and sodium ions, coupled to an H(+) antiporter activity (PubMed:<a href="http://www.uniprot.org/citations/11243884"

target="_blank">11243884). Releases L-glutamine and glycine from astroglial cells and may participate in the glutamate/GABA-L-glutamine cycle and the NMDA receptors activation (By similarity). In addition, contributes significantly to L-glutamine uptake in retina, namely in ganglion and Mueller cells therefore, participates in the retinal glutamate- glutamine cycle (By similarity). The transport activity is pH sensitive and Li(+) tolerant (PubMed:11243884). Moreover functions in both direction and is associated with large uncoupled fluxes of protons (By similarity). The transport is electroneutral coupled to the cotransport of 1 Na(+) and the antiport of 1 H(+) (By



similarity). May have a particular importance for modulation of net hepatic glutamine flux (By similarity).

Cellular Location Cell membrane {ECO:0000250|UniProtKB:A2VCW5}; Multi-pass membrane protein. Note=Localized at astroglial membrane. {ECO:0000250|UniProtKB:A2VCW5}

Tissue Location

Predominantly expressed in stomach, brain, liver, lung and intestinal tract.

SLC38A5 Antibody (N-term) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

SLC38A5 Antibody (N-term) Blocking peptide - Images

SLC38A5 Antibody (N-term) Blocking peptide - Background

The protein encoded by this gene is a system Nsodium-coupled amino acid transporter involved in the transfer ofglutamine, asparagine, histidine, serine, alanine, and glycine. The encoded protein does not transport charged amino acids, iminoacids, or N-alkylated amino acids. This transporter is notinhibited by lithium.

SLC38A5 Antibody (N-term) Blocking peptide - References

Broer, S. Physiol. Rev. 88(1):249-286(2008)Froyen, G., et al. Hum. Genet. 121(5):539-547(2007)Nakanishi, T., et al. Biochem. Biophys. Res. Commun. 281(5):1343-1348(2001)