

**SLC1A2 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17647a****Specification**

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**SLC1A2 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P43004](#)**SLC1A2 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 6506**Other Names**

Excitatory amino acid transporter 2, Glutamate/aspartate transporter II, Sodium-dependent glutamate/aspartate transporter 2, Solute carrier family 1 member 2, SLC1A2, EAAT2, GLT1

**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.

**SLC1A2 Antibody (N-term) Blocking Peptide - Protein Information****Name** SLC1A2 ([HGNC:10940](#))**Function**

Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:<a href="http://www.uniprot.org/citations/7521911" target="\_blank">7521911</a>, PubMed:<a href="http://www.uniprot.org/citations/14506254" target="\_blank">14506254</a>, PubMed:<a href="http://www.uniprot.org/citations/15265858" target="\_blank">15265858</a>, PubMed:<a href="http://www.uniprot.org/citations/26690923" target="\_blank">26690923</a>). 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:<a href="http://www.uniprot.org/citations/14506254" target="\_blank">14506254</a>). 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:<a href="http://www.uniprot.org/citations/14506254" target="\_blank">14506254</a>). Essential for the rapid removal of released glutamate from the synaptic cleft, and for terminating the postsynaptic action of glutamate (By similarity).

**Cellular Location**

Cell membrane; Multi-pass membrane protein

### **SLC1A2 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **SLC1A2 Antibody (N-term) Blocking Peptide - Images**

### **SLC1A2 Antibody (N-term) Blocking Peptide - Background**

This gene encodes a member of a family of solutetransporter proteins. The membrane-bound protein is the principal transporter that clears the excitatory neurotransmitter glutamate from the extracellular space at synapses in the central nervous system. Glutamate clearance is necessary for proper synaptic activation and to prevent neuronal damage from excessive activation of glutamate receptors. Mutations in and decreased expression of this protein are associated with amyotrophic lateral sclerosis. Alternatively spliced transcript variants of this gene have been identified.

### **SLC1A2 Antibody (N-term) Blocking Peptide - References**

Gebhardt, F.M., et al. J. Biol. Chem. 285(41):31313-31324(2010) Tian, G., et al. J. Neurochem. 113(4):978-989(2010) Nagai, Y., et al. Neurosci. Lett. 463(3):223-227(2009) Sasaki, K., et al. FEBS Lett. 583(13):2194-2200(2009) Gehring, E.M., et al. Cell. Physiol. Biochem. 24 (5-6), 361-368 (2009)  
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