

SLC7A7 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP17085b**Specification**

SLC7A7 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O9UM01](#)**SLC7A7 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 9056

Other Names

Y+L amino acid transporter 1, Monocyte amino acid permease 2, MOP-2, Solute carrier family 7 member 7, y(+)L-type amino acid transporter 1, Y+LAT1, y+LAT-1, SLC7A7

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.

SLC7A7 Antibody (C-term) Blocking Peptide - Protein InformationName SLC7A7 ([HGNC:11065](#))**Function**

Heterodimer with SLC3A2, that functions as an antiporter which operates as an efflux route by exporting cationic amino acids from inside the cells in exchange with neutral amino acids plus sodium ions and may participate in nitric oxide synthesis via the transport of L-arginine (PubMed: [9878049](http://www.uniprot.org/citations/9878049)), PubMed: [9829974](http://www.uniprot.org/citations/9829974)), PubMed: [17329401](http://www.uniprot.org/citations/17329401)), PubMed: [10080182](http://www.uniprot.org/citations/10080182)), PubMed: [10655553](http://www.uniprot.org/citations/10655553)), PubMed: [15756301](http://www.uniprot.org/citations/15756301)), PubMed: [15776427](http://www.uniprot.org/citations/15776427)), PubMed: [14603368](http://www.uniprot.org/citations/14603368))). Also mediates arginine transport in non-polarized cells, such as monocytes, and is essential for the correct function of these cells (PubMed: [15280038](http://www.uniprot.org/citations/15280038)), PubMed: [31705628](http://www.uniprot.org/citations/31705628)). The transport mechanism is electroneutral and operates with a stoichiometry of 1:1 (By similarity). In vitro, Na(+) and Li(+), but also H(+), are cotransported with the neutral amino acids (By similarity).

Cellular Location

Basolateral cell membrane; Multi-pass membrane protein

Tissue Location

Highest expression in kidney and peripheral blood leukocytes (PubMed:9829974). Weaker expression is observed in lung, heart, placenta, spleen, testis and small intestine (PubMed:9829974) Expressed in normal fibroblasts and those from LPI patients (PubMed:10080183, PubMed:11078698). Also expressed in HUVECs, monocytes, retinal pigment epithelial cells, and various carcinoma cell lines, with highest expression in a colon-carcinoma cell line (PubMed:11742806, PubMed:15280038, PubMed:17197568, PubMed:17329401)

SLC7A7 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC7A7 Antibody (C-term) Blocking Peptide - Images**SLC7A7 Antibody (C-term) Blocking Peptide - Background**

The protein encoded by this gene is the light subunit of a cationic amino acid transporter. This sodium-independent transporter is formed when the light subunit encoded by this gene dimerizes with the heavy subunit transporter protein SLC3A2. This transporter is found in epithelial cell membranes where it transfers cationic and large neutral amino acids from the cell to the extracellular space. Defects in this gene are a cause of lysinuric protein intolerance (LPI). Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq].

SLC7A7 Antibody (C-term) Blocking Peptide - References

Rose, J. Phd, et al. Mol. Med. (2010) In press :Font-Llitjos, M., et al. Eur. J. Hum. Genet. 17(1):71-79(2009) Broer, S. Physiol. Rev. 88(1):249-286(2008) Sperandio, M.P., et al. Hum. Mutat. 29(1):14-21(2008) Cimbalistiene, L., et al. J. Appl. Genet. 48(3):277-280(2007)