

SLC6A19 Blocking Peptide (C-Term)
Synthetic peptide
Catalog # BP22057b**Specification**

SLC6A19 Blocking Peptide (C-Term) - Product InformationPrimary Accession [Q695T7](#)**SLC6A19 Blocking Peptide (C-Term) - Additional Information****Gene ID** 340024**Other Names**

Sodium-dependent neutral amino acid transporter B(0)AT1, Solute carrier family 6 member 19, System B(0) neutral amino acid transporter AT1, SLC6A19, B0AT1

Target/Specificity

The synthetic peptide sequence is selected from aa 564-575 of HUMAN SLC6A19

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.

SLC6A19 Blocking Peptide (C-Term) - Protein Information**Name** SLC6A19**Synonyms** B0AT1**Function**

Transporter that mediates resorption of neutral amino acids across the apical membrane of renal and intestinal epithelial cells (PubMed: [15286787](http://www.uniprot.org/citations/15286787), PubMed: [15286788](http://www.uniprot.org/citations/15286788), PubMed: [18424768](http://www.uniprot.org/citations/18424768), PubMed: [18484095](http://www.uniprot.org/citations/18484095), PubMed: [19185582](http://www.uniprot.org/citations/19185582), PubMed: [26240152](http://www.uniprot.org/citations/26240152)). This uptake is sodium-dependent and chloride-independent (PubMed: [15286787](http://www.uniprot.org/citations/15286787), PubMed: [19185582](http://www.uniprot.org/citations/19185582), PubMed: [15286788](http://www.uniprot.org/citations/15286788)). Requires CLTRN in kidney or ACE2 in intestine for cell surface expression and amino acid

transporter activity (PubMed:19185582, PubMed:18424768).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Colocalizes with ACE2 on the apical membrane of cells lining villi of the jejunum, ileum and on kidney proximal tubules.

Tissue Location

Robust expression in kidney and small intestine, with minimal expression in pancreas (PubMed:18424768, PubMed:15286787) Also expressed in stomach, liver, duodenum, ileocecum, colon and prostate. Not detected in testis, whole brain, cerebellum, fetal liver, spleen, skeletal muscle, uterus, heart or lung

SLC6A19 Blocking Peptide (C-Term) - Protocols

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

- [Blocking Peptides](#)

SLC6A19 Blocking Peptide (C-Term) - Images**SLC6A19 Blocking Peptide (C-Term) - Background**

Transporter that mediates epithelial resorption of neutral amino acids across the apical membrane of epithelial cells in the kidney and intestine. It appears that leucine is the preferred substrate, but all large neutral non-aromatic L-amino acids bind to this transporter. Uptake of leucine is sodium-dependent. In contrast to other members of the neurotransmitter transporter family, does not appear to be chloride-dependent (By similarity).

SLC6A19 Blocking Peptide (C-Term) - References

Kleta R.,et al.Nat. Genet. 36:999-1002(2004).
Seow H.F.,et al.Nat. Genet. 36:1003-1007(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Broer S.,et al.J. Clin. Invest. 118:3881-3892(2008).