10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

SLC6A19 Blocking Peptide (C-Term)

Synthetic peptide
Catalog # BP22057b

Specification

SLC6A19 Blocking Peptide (C-Term) - Product Information

Primary 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

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).

membrane of renal and intestinal epithelial cells (PubMed:18424768, PubMed:18484095, PubMed:19185582, PubMed:26240152). This uptake is sodium-dependent and chloride-independent (PubMed:19185582, PubMed: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