

SLC5A11 Blocking Peptide (N-term)

Synthetic peptide

Catalog # BP19993a

Specification

SLC5A11 Blocking Peptide (N-term) - Product Information

Primary Accession

[O8WWX8](#)

Other Accession

[NP_443176.2](#)**SLC5A11 Blocking Peptide (N-term) - Additional Information**

Gene ID 115584

Other Names

Sodium/myo-inositol cotransporter 2, Na(+)/myo-inositol cotransporter 2, Sodium-dependent glucose cotransporter, Sodium/glucose cotransporter KST1, Sodium/myo-inositol transporter 2, SMIT2, Solute carrier family 5 member 11, SLC5A11 {ECO:0000312|EMBL:EAW557811}

Target/Specificity

The synthetic peptide sequence is selected from aa 14-25 of HUMAN SLC5A11

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.

SLC5A11 Blocking Peptide (N-term) - Protein InformationName SLC5A11 ([HGNC:23091](#))**Function**

Involved in the sodium-dependent cotransport of myo-inositol (MI) with a Na(+):MI stoichiometry of 2:1 (PubMed:15172003, PubMed:19032932). Exclusively responsible for apical MI transport and absorption in intestine (By similarity). Can also transport D-chiro- inositol (DCI) but not L-fucose (PubMed:15172003, PubMed:19032932). Exhibits stereospecific cotransport of both D-glucose and D-xylose (By similarity). May induce apoptosis through the TNF-alpha, PDCD1 pathway (PubMed:15172003, PubMed:18069935). May play a role in the regulation of MI concentration in serum, involving reabsorption in at least the proximal

tubule of the kidney (By similarity).

Cellular Location

Membrane; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:Q9Z1F2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9Z1F2}. Note=Located on apical membrane of enterocytes (By similarity). Located on membrane of kidney brush border membrane vesicles (BBMVs) and apical membrane of proximal convoluted tubules (By similarity). {ECO:0000250|UniProtKB:Q28728, ECO:0000250|UniProtKB:Q9Z1F2}

Tissue Location

Highest expression in heart, skeletal muscle, kidney, liver and placenta. Weaker expression in brain, colon, spleen, lung and peripheral blood leukocytes.

SLC5A11 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

SLC5A11 Blocking Peptide (N-term) - Images

SLC5A11 Blocking Peptide (N-term) - Background

Cotransporters, such as SLC5A11, represent a major class of proteins that make use of ion gradients to drive active transport for the cellular accumulation of nutrients, neurotransmitters, osmolytes, and ions Roll et al. (2002) [PubMed 12039040].

SLC5A11 Blocking Peptide (N-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Tsai, L.J., et al. Tissue Antigens 71(2):114-126(2008)
Coady, M.J., et al. J. Biol. Chem. 277(38):35219-35224(2002)
Roll, P., et al. Gene 285 (1-2), 141-148 (2002) :