

SLC22A11 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP8679c

Specification

SLC22A11 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [O9NSA0](#)

SLC22A11 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 55867

Other Names

Solute carrier family 22 member 11, Organic anion transporter 4, SLC22A11, OAT4

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8679c](/products/AP8679c) was selected from the Center region of human SLC22A11. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SLC22A11 Antibody (Center) Blocking Peptide - Protein Information

Name SLC22A11 ([HGNC:18120](#))

Synonyms OAT4

Function

Antiporter that mediates the transport of conjugated steroids and other specific organic anions at the basal membrane of syncytiotrophoblast and at the apical membrane of proximal tubule epithelial cells, in exchange for anionic compounds (PubMed:[10660625](http://www.uniprot.org/citations/10660625), PubMed:[11907186](http://www.uniprot.org/citations/11907186), PubMed:[15037815](http://www.uniprot.org/citations/15037815), PubMed:[15102942](http://www.uniprot.org/citations/15102942), PubMed:[15291761](http://www.uniprot.org/citations/15291761), PubMed:[15576633](http://www.uniprot.org/citations/15576633), PubMed:[17229912](http://www.uniprot.org/citations/17229912)),

<http://www.uniprot.org/citations/18501590> target="_blank">18501590, PubMed:26277985, PubMed:28027879). May be responsible for placental absorption of fetal- derived steroid sulfates such as estrone sulfate (E1S) and the steroid hormone precursor dehydroepiandrosterone sulfate (DHEA-S), as well as clearing waste products and xenobiotics from the fetus (PubMed:12409283). Maybe also be involved in placental urate homeostasis (PubMed:17229912). Facilitates the renal reabsorption of organic anions such as urate and derived steroid sulfates (PubMed:15037815, PubMed:17229912). Organic anion glutarate acts as conteranion for E1S renal uptake (PubMed:15037815, PubMed:17229912). Possible transport mode may also include DHEA-S/E1S exchange (PubMed:28027879). Also interacts with inorganic anions such as chloride and hydroxyl ions, therefore possible transport modes may include E1S/Cl(-), E1S/OH(-), urate/Cl(-) and urate/OH(-) (PubMed:17229912). Also mediates the transport of prostaglandin E2 (PGE2) and prostaglandin F2-alpha (PGF2-alpha) and may be involved in their renal excretion (PubMed:11907186). Also able to uptake anionic drugs, diuretics, bile salts and ochratoxin A (PubMed:10660625, PubMed:26277985). Mediates the unidirectional efflux of glutamate and aspartate (PubMed:28027879). Glutamate efflux down its transmembrane gradient may drive SLC22A11/OAT4-mediated placental uptake of E1S (PubMed:26277985).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein Note=Expressed at the apical membrane of the proximal tubule epithelial cells (PubMed:15037815). Expressed at the basal membrane of the syncytiotrophoblast (PubMed:12409283).

Tissue Location

Expressed in placental trophoblasts, syncytiotrophoblast and cytotrophoblast (PubMed:10660625, PubMed:12409283, PubMed:26277985). Also located in the proximal tubules in kidneys (PubMed:10660625, PubMed:15037815, PubMed:26277985)

SLC22A11 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC22A11 Antibody (Center) Blocking Peptide - Images

SLC22A11 Antibody (Center) Blocking Peptide - Background

SLC22A11 is involved in the sodium-independent transport and excretion of organic anions, some of which are potentially toxic. This protein is an integral membrane protein and is found mainly in the kidney and in the placenta, where it may act to prevent potentially harmful organic anions from reaching the fetus.

SLC22A11 Antibody (Center) Blocking Peptide - References

Babu,E., et.al., Jpn. J. Pharmacol. 88 (1), 69-76 (2002)