

SLCO4C1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP11795b**Specification**

SLCO4C1 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [O6ZQN7](#)**SLCO4C1 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 353189

Other Names

Solute carrier organic anion transporter family member 4C1, OATP-H, Organic anion transporter M1, OATP-M1, Solute carrier family 21 member 20, SO4C1

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.

SLCO4C1 Antibody (C-term) Blocking peptide - Protein Information**Name** SLCO4C1 {ECO:0000312|EMBL:EAW49099.1, ECO:0000312|HGNC:HGNC:23612}**Function**

Mediates the transport of organic anions such as steroids (estrone 3-sulfate, chenodeoxycholate, glycocholate) and thyroid hormones (3,3',5-triiodo-L-thyronine (T3), L-thyroxine (T4)), in the kidney (PubMed:14993604, PubMed:19129463, PubMed:20610891). Capable of transporting cAMP and pharmacological substances such as digoxin, ouabain and methotrexate (PubMed:14993604). Transport is independent of sodium, chloride ion, and ATP (PubMed:14993604). Transport activity is stimulated by an acidic extracellular environment due to increased substrate affinity to the transporter (PubMed:19129463). The driving force for this transport activity is currently not known (By similarity). The role of hydrogencarbonate (HCO₃⁻, bicarbonate) as the probable counteranion that exchanges for organic anions is still not well defined (PubMed:19129463). Functions as an uptake transporter at the apical membrane, suggesting a role in renal reabsorption (By

similarity). Involved in the renal secretion of the uremic toxin ADMA (N(omega),N(omega)-dimethyl-L-arginine or asymmetrical dimethylarginine), which is associated to cardiovascular events and mortality, and the structurally related amino acids L-arginine and L-homoarginine (a cardioprotective biomarker) (PubMed:30865704). Can act bidirectionally, suggesting a dual protective role of this transport protein; exporting L-homoarginine after being synthesized in proximal tubule cells, and mediating uptake of ADMA from the blood into proximal tubule cells where it is degraded by the enzyme dimethylarginine dimethylaminohydrolase 1 (DDAH1) (PubMed:30865704, PubMed:32642843). May be involved in sperm maturation by enabling directed movement of organic anions and compounds within or between cells (By similarity). This ion-transporting process is important to maintain the strict epididymal homeostasis necessary for sperm maturation (By similarity). May have a role in secretory functions since seminal vesicle epithelial cells are assumed to secrete proteins involved in decapacitation by modifying surface proteins to facilitate the acquisition of the ability to fertilize the egg (By similarity).

Cellular Location

Basolateral cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q71MB6}. Note=Detected at the basolateral membrane of the proximal tubule cell in the kidney {ECO:0000250|UniProtKB:Q71MB6, ECO:0000269|PubMed:30865704}

Tissue Location

Predominantly expressed in kidney but also weakly expressed in both fetal liver and kidney

SLC04C1 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SLC04C1 Antibody (C-term) Blocking peptide - Images

SLC04C1 Antibody (C-term) Blocking peptide - Background

SHISA3 plays an essential role in the maturation of presomitic mesoderm cells by individual attenuation of both FGF and WNT signaling (By similarity).

SLC04C1 Antibody (C-term) Blocking peptide - References

Furushima, K., et al. Dev. Biol. 306(2):480-492(2007)