

SLCO2B1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP16480a**Specification**

SLCO2B1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O94956](#)**SLCO2B1 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 11309

Other Names

Solute carrier organic anion transporter family member 2B1, Organic anion transporter B, OATP-B, Organic anion transporter polypeptide-related protein 2, OATP-RP2, OATPRP2, Solute carrier family 21 member 9, SLCO2B1, KIAA0880, OATP2B1, OATPB, SLC21A9

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.

SLCO2B1 Antibody (N-term) Blocking Peptide - Protein InformationName SLCO2B1 ([HGNC:10962](#))**Function**

Mediates the Na(+)-independent transport of steroid sulfate conjugates and other specific organic anions (PubMed:10873595, PubMed:11159893, PubMed:11932330, PubMed:12724351, PubMed:14610227, PubMed:16908597, PubMed:18501590, PubMed:20507927, PubMed:22201122, PubMed:23531488, PubMed:25132355, PubMed:27576593, PubMed:26383540, PubMed:28408210, PubMed:29871943)

target="_blank">29871943, PubMed:34628357). Responsible for the transport of estrone 3-sulfate (E1S) through the basal membrane of syncytiotrophoblast, highlighting a potential role in the placental absorption of fetal-derived sulfated steroids including the steroid hormone precursor dehydroepiandrosterone sulfate (DHEA-S) (PubMed:11932330, PubMed:12409283). Also facilitates the uptake of sulfated steroids at the basal/sinusoidal membrane of hepatocytes, therefore accounting for the major part of organic anions clearance of liver (PubMed:11159893). Mediates the intestinal uptake of sulfated steroids (PubMed:12724351, PubMed:28408210). Mediates the uptake of the neurosteroids DHEA-S and pregnenolone sulfate (PregS) into the endothelial cells of the blood-brain barrier as the first step to enter the brain (PubMed:16908597, PubMed:25132355). Also plays a role in the reuptake of neuropeptides such as substance P/TAC1 and vasoactive intestinal peptide/VIP released from retinal neurons (PubMed:25132355). May act as a heme transporter that promotes cellular iron availability via heme oxygenase/HMOX2 and independently of TFRC (PubMed:35714613). Also transports heme by-product coproporphyrin III (CPIII), and may be involved in their hepatic disposition (PubMed:26383540). Mediates the uptake of other substrates such as prostaglandins D2 (PGD2), E1 (PGE1) and E2 (PGE2), taurocholate, L-thyroxine, leukotriene C4 and thromboxane B2 (PubMed:10873595, PubMed:14610227, PubMed:19129463, Ref.25, PubMed:29871943). May contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (Probable). Shows a pH-sensitive substrate specificity which may be ascribed to the protonation state of the binding site and leads to a stimulation of substrate transport in an acidic microenvironment (PubMed:14610227, PubMed:19129463, PubMed:22201122). The exact transport mechanism has not been yet deciphered but most likely involves an anion exchange, coupling the cellular uptake of organic substrate with the efflux of an anionic compound (PubMed:19129463, PubMed:20507927, PubMed:26277985). Hydrogencarbonate/HCO₃⁻ acts as a probable counteranion that exchanges for organic anions (PubMed:19129463). Cytoplasmic glutamate may also act as counteranion in the placenta (PubMed:26277985). An inwardly directed proton gradient has also been proposed as the driving force of E1S uptake with a (H⁺):E1S stoichiometry of (1:1) (PubMed:20507927).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Expressed at the basal membrane of hepatocytes, syncytiotrophoblast and Sertoli cells (PubMed:11159893, PubMed:11932330, PubMed:12409283, PubMed:35307651). Localized to the basolateral membrane of enterocytes (PubMed:28408210). Also found at the apical membrane of enterocytes (PubMed:12724351, PubMed:28408210)

Tissue Location

Strongly expressed in the liver, at the sinusoidal membrane of the hepatocytes (PubMed:10873595, PubMed:11159893, PubMed:23531488). Expressed in the kidney (PubMed:11159893). Expressed in placental trophoblasts and syncytiotrophoblast (PubMed:11159893, PubMed:11932330, PubMed:12409283, PubMed:26277985). Expressed in the small intestine (PubMed:10873595, PubMed:11159893, PubMed:12724351, PubMed:23531488, PubMed:28408210). Expressed in the blood-brain barrier, in endothelial cells of brain capillaries (PubMed:11159893, PubMed:25132355). Expressed in the retina, in the inner nuclear layer and the inner plexiform layer (PubMed:25132355). Expressed in skeletal muscles (PubMed:23531488). In testis, primarily localized to the basal membrane of Sertoli cells and weakly expressed within the tubules (PubMed:10873595, PubMed:11159893, PubMed:35307651). Also expressed in pancreas, lung, heart, colon, ovary and spleen (PubMed:10873595, PubMed:11159893). Expressed in fetal brain, heart, kidney, liver, lung, skeletal muscle, spleen and pancreas (PubMed:10873595) [Isoform 3]: Predominant isoform compared to isoform 1 in liver. Also expressed in small intestine duodenum, kidney, brain, placenta, and skeletal muscle.

SLC02B1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC02B1 Antibody (N-term) Blocking Peptide - Images**SLC02B1 Antibody (N-term) Blocking Peptide - Background**

This locus encodes a member of the organic anion-transporting polypeptide family of membrane proteins. The protein encoded by this locus may function in regulation of placental uptake of sulfated steroids. Alternatively spliced transcript variants have been described.

SLC02B1 Antibody (N-term) Blocking Peptide - References

Man, M., et al. J Clin Pharmacol 50(8):929-940(2010) Justenhoven, C., et al. Breast Cancer Res. Treat. (2010) In press :Laitinen, A., et al. Basic Clin. Pharmacol. Toxicol. (2010) In press :Kock, K., et al. J. Biol. Chem. 285(15):11336-11347(2010) Hagenbuch, B., et al. Pflugers Arch. 447(5):653-665(2004)