

SLCO1B1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9609c

Specification

SLCO1B1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [Q9Y6L6](#)

SLCO1B1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 10599

Other Names

Solute carrier organic anion transporter family member 1B1, Liver-specific organic anion transporter 1, LST-1, OATP-C, Sodium-independent organic anion-transporting polypeptide 2, OATP-2, Solute carrier family 21 member 6, SLCO1B1, LST1, OATP1B1, OATP2, OATPC, SLC21A6

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.

SLCO1B1 Antibody (Center) Blocking Peptide - Protein Information

Name SLCO1B1

Synonyms LST1, OATP1B1, OATP2, OATPC, SLC21A6

Function

Mediates the Na(+) -independent uptake of organic anions (PubMed:10358072, PubMed:15159445, PubMed:17412826). Shows broad substrate specificity, can transport both organic anions such as bile acid taurocholate (cholyltaurine) and conjugated steroids (dehydroepiandrosterone 3-sulfate, 17-beta-glucuronosyl estradiol, and estrone 3-sulfate), as well as eicosanoids (prostaglandin E2, thromboxane B2, leukotriene C4, and leukotriene E4), and thyroid hormones (T4/L-thyroxine, and T3/3',5'-triodo-L-thyronine) (PubMed:10358072, PubMed:10601278, PubMed:10873595, PubMed:12568656, PubMed:15159445, PubMed:15970799)

target="_blank">>15970799, PubMed:>16627748, PubMed:>17412826, PubMed:>12196548, PubMed:>11159893, PubMed:>19129463, PubMed:>26979622). Can take up bilirubin glucuronides from plasma into the liver, contributing to the detoxification-enhancing liver-blood shuttling loop (PubMed:>22232210). Involved in the clearance of endogenous and exogenous substrates from the liver (PubMed:>10358072, PubMed:>10601278). Transports coproporphyrin I and III, by-products of heme synthesis, and may be involved in their hepatic disposition (PubMed:>26383540). May contribute to regulate the transport of organic compounds in testes across the blood-testis-barrier (Probable). Can transport HMG-CoA reductase inhibitors (also known as statins), such as pravastatin and pitavastatin, a clinically important class of hypolipidemic drugs (PubMed:>10601278, PubMed:>15970799, PubMed:>15159445). May play an important role in plasma and tissue distribution of the structurally diverse chemotherapeutic drug methotrexate (PubMed:>23243220). May also transport antihypertension agents, such as the angiotensin-converting enzyme (ACE) inhibitor prodrug enalapril, and the highly selective angiotensin II AT1-receptor antagonist valsartan, in the liver (PubMed:>16627748, PubMed:>16624871). Shows a pH-sensitive substrate specificity towards prostaglandin E2 and T4 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:>19129463). Hydrogencarbonate/HCO₃(-) acts as the probable counteranion that exchanges for organic anions (PubMed:>19129463, PubMed:>19129463).

Cellular Location

Basolateral cell membrane; Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein. Note=Detected in basolateral membranes of hepatocytes (PubMed:12196548). Localized to the basal membrane of Sertoli cells (PubMed:35307651).

Tissue Location

Highly expressed in liver, at the basolateral membranes of centrilobular hepatocytes (PubMed:10358072, PubMed:10601278, PubMed:10873595, PubMed:12196548, PubMed:22232210) Expressed in liver (at protein level) (PubMed:15159445). Expressed in fetal liver (PubMed:10873595). Not detected in heart, brain, placenta, lung, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and leukocyte (PubMed:10358072, PubMed:10873595). In testis, primarily localized to the basal membrane of Sertoli cells and weakly expressed in Leydig cells and within the tubules (PubMed:35307651).

SLCO1B1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLCO1B1 Antibody (Center) Blocking Peptide - Images

SLCO1B1 Antibody (Center) Blocking Peptide - Background

AP9609c is a liver-specific member of the organic anion transporter family. This protein is a transmembrane receptor that mediates the sodium-independent uptake of numerous endogenous compounds including bilirubin, 17-beta-glucuronosyl estradiol and leukotriene C4. This protein is also involved in the removal of drug compounds such as statins, bromosulfophthalein and rifampin from the blood into the hepatocytes. Polymorphisms in the gene encoding this protein are associated with impaired transporter function.

SLCO1B1 Antibody (Center) Blocking Peptide - References

Jung, D., et al. J. Biol. Chem. 276(40):37206-37214(2001)
Cui, Y., et al. J. Biol. Chem. 276(13):9626-9630(2001)
Konig, J., et al. J. Biol. Chem. 275(30):23161-23168(2000)