

**SLCO1B1 Antibody**  
Catalog # ASC11931**Specification****SLCO1B1 Antibody - Product Information**

Application	IF
Primary Accession	<a href="#">Q9Y6L6</a>
Other Accession	<a href="#">NP_006437</a> , <a href="#">10599</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 76 kDa

Application Notes	<b>Observed: 75 kDa KDa</b> SLCO1B1 antibody can be used for detection of SLCO1B1 by Western blot at 1 - 2 µg/ml. For immunofluorescence start at 20 µg/mL.
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**SLCO1B1 Antibody - Additional Information**Gene ID **10599****Target/Specificity**

SLCO1B1 antibody was raised against a 14 amino acid peptide near the carboxy terminus of human SLCO1B1. <br><br>The immunogen is located within the last 50 amino acids of SLCO1B1.

**Reconstitution & Storage**

Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

SLCO1B1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SLCO1B1 Antibody - Protein Information**

Name SLCO1B1

Synonyms LST1, OATP1B1, OATP2, OATPC, SLC21A6

**Function**

Mediates the Na(+)-independent uptake of organic anions (PubMed: <a href="http://www.uniprot.org/citations/10358072" target="\_blank">10358072</a>, PubMed: <a href="http://www.uniprot.org/citations/15159445" target="\_blank">15159445</a>, PubMed: <a href="http://www.uniprot.org/citations/17412826" target="\_blank">17412826</a>). Shows broad substrate specificity, can transport both organic anions such as bile acid taurocholate (cholytaurine) 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 T3/3,3',5'-triiodo-L-thyronine) (PubMed:<a href="http://www.uniprot.org/citations/10358072" target="\_blank">10358072</a>, PubMed:<a href="http://www.uniprot.org/citations/10601278" target="\_blank">10601278</a>, PubMed:<a href="http://www.uniprot.org/citations/10873595" target="\_blank">10873595</a>, PubMed:<a href="http://www.uniprot.org/citations/11159893" target="\_blank">11159893</a>, PubMed:<a href="http://www.uniprot.org/citations/12196548" target="\_blank">12196548</a>, PubMed:<a href="http://www.uniprot.org/citations/12568656" target="\_blank">12568656</a>, PubMed:<a href="http://www.uniprot.org/citations/15159445" target="\_blank">15159445</a>, PubMed:<a href="http://www.uniprot.org/citations/15970799" target="\_blank">15970799</a>, PubMed:<a href="http://www.uniprot.org/citations/16627748" target="\_blank">16627748</a>, PubMed:<a href="http://www.uniprot.org/citations/17412826" target="\_blank">17412826</a>, PubMed:<a href="http://www.uniprot.org/citations/19129463" target="\_blank">19129463</a>, PubMed:<a href="http://www.uniprot.org/citations/26979622" target="\_blank">26979622</a>). Can take up bilirubin glucuronides from plasma into the liver, contributing to the detoxification-enhancing liver-blood shuttling loop (PubMed:<a href="http://www.uniprot.org/citations/22232210" target="\_blank">22232210</a>). Involved in the clearance of endogenous and exogenous substrates from the liver (PubMed:<a href="http://www.uniprot.org/citations/10358072" target="\_blank">10358072</a>, PubMed:<a href="http://www.uniprot.org/citations/10601278" target="\_blank">10601278</a>). Transports coproporphyrin I and III, by-products of heme synthesis, and may be involved in their hepatic disposition (PubMed:<a href="http://www.uniprot.org/citations/26383540" target="\_blank">26383540</a>). 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:<a href="http://www.uniprot.org/citations/10601278" target="\_blank">10601278</a>, PubMed:<a href="http://www.uniprot.org/citations/15159445" target="\_blank">15159445</a>, PubMed:<a href="http://www.uniprot.org/citations/15970799" target="\_blank">15970799</a>). May play an important role in plasma and tissue distribution of the structurally diverse chemotherapeutic drug methotrexate (PubMed:<a href="http://www.uniprot.org/citations/23243220" target="\_blank">23243220</a>). 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:<a href="http://www.uniprot.org/citations/16624871" target="\_blank">16624871</a>, PubMed:<a href="http://www.uniprot.org/citations/16627748" target="\_blank">16627748</a>). 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:<a href="http://www.uniprot.org/citations/19129463" target="\_blank">19129463</a>). Hydrogencarbonate/HCO<sub>3</sub><sup>(-)</sup> acts as the probable counteranion that exchanges for organic anions (PubMed:<a href="http://www.uniprot.org/citations/19129463" target="\_blank">19129463</a>).

### 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

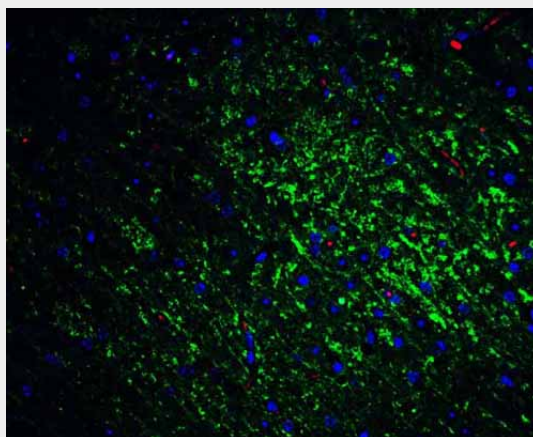
Highly expressed in liver, at the basolateral membranes of centrilobular hepatocytes (PubMed:10358072, PubMed:10601278, PubMed:10873595, PubMed:12196548, PubMed:22232210) Expressed in liver (at protein level) (PubMed:15159445). Expressed in fetal liver (PubMed:10873595). Not detected in heart, brain, 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 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **SLCO1B1 Antibody - Images**



Immunofluorescence of Slitrk1 in mouse brain tissue with Slitrk1 Antibody at 20 µg/mL.

#### **SLCO1B1 Antibody - Background**

SLCO1B1 is a transmembrane receptor that mediates the sodium-independent uptake of numerous endogenous compounds including bilirubin, 17-beta-glucuronosyl estradiol and may play an important role in the clearance of bile acids and organic anions from the liver (1,2). It contains one Kazal-like domain and belongs to the organo-anion transporter family (2,3). SLCO1B1 is highly expressed in liver and is localized to the basolateral hepatocyte membrane. It is responsible for the hepatic uptake of the liver-specific hydroxymethylglutaryl-CoA reductase inhibitor in mouse, rat and human (3,4).

#### **SLCO1B1 Antibody - References**

- Abe T, Kakyo M, Tokui T, et al. Identification of a novel gene family encoding human liver-specific organic anion transporter LST-1. *J. Biol. Chem.* 1999; 274:17159-63.
- Konig J, Cui Y, Nies AT, et al. A novel human organic anion transporting polypeptide localized to the basolateral hepatocyte membrane. *Am. J. Physiol. Gastrointest. Liver Physiol.* 2000; 278:G156-64.
- Michalski C, Cui Y, Nies AT, et al. A naturally occurring mutation in the SLC21A6 gene causing impaired membrane localization of the hepatocyte uptake transporter. *J. Biol. Chem.* 2002; 277:43058-63.
- Yao J, Hong W, Huang J, et al. N-Glycosylation dictates proper processing of organic anion transporting polypeptide 1B1. *PLoS One* 2012; 7:e52563.