

## SLCO1B1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9609c

### Specification

# SLCO1B1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>Q9Y6L6</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	267-293

## SLCO1B1 Antibody (Center) - 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

#### Target/Specificity

This SLCO1B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 267-293 amino acids from the Central region of human SLCO1B1.

Dilution WB~~1:1000

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

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

## SLCO1B1 Antibody (Center) - 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 T3/3,3',5'-triiodo-L-thyronine) (PubMed:10358072, PubMed:10601278, PubMed:10873595, PubMed:11159893, PubMed:12196548, PubMed:12568656, PubMed:15159445, PubMed:15970799, PubMed:16627748, PubMed:17412826, 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:<u>10601278</u>, PubMed:<u>15159445</u>, PubMed:<u>15970799</u>). 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: 16624871, PubMed: 16627748). 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:<u>19129463</u>).

## **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) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# SLCO1B1 Antibody (Center) - Images





All lanes : Anti-SLCO1B1 Antibody (Center) at 1:500 dilution Lane 1: Human breast tissue lysate Lane 2: HepG2 whole cell lysate Lane 3: SW480 whole cell lysate Lane 4: NCI-H460 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 76 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of lysate from human liver tissue lysate, using SLCO1B1 Antibody (Center)(Cat. #AP9609c). AP9609c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.





Western blot analysis of SLCO1B1 Antibody (Center) (Cat. #AP9609c) in HepG2 cell line lysates (35ug/lane). SLCO1B1 (arrow) was detected using the purified Pab.

# SLCO1B1 Antibody (Center) - 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) - 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)