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SLCO2B1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58108

Specification

SLCO2B1 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	O94956
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**77 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human SLCO2B1**
Epitope Specificity	**531-630/709**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cell membrane; Multi-pass membrane protein.**
SIMILARITY	**Belongs to the organo anion transporter (TC 2.A.60) family. Contains 1 Kazal-like domain.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
SLCO2B1 (solute carrier organic anion transporter family member 2B1), or Organic anion transporter B (OATP-B) mediates sodium-independent transport of organic anions. Unlike other related proteins, SLCO2B1 is expressed in many tissues, including liver, placenta, brain, heart and intestine. SLCO2B1 plays a role in the uptake of steroids and a number of drugs such as statins.

SLCO2B1 Polyclonal Antibody - 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

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \><span class

="dilution_IF">IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

SLCO2B1 Polyclonal Antibody - Protein Information

Name 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:26383540, PubMed:27576593, PubMed:28408210, PubMed: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, PubMed:29871943, Ref.25). 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 skelettal 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.

SLCO2B1 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides

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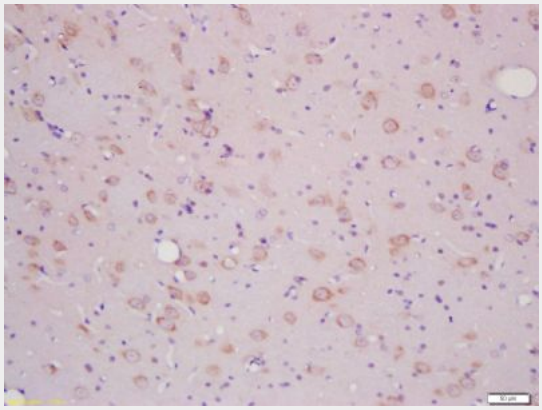
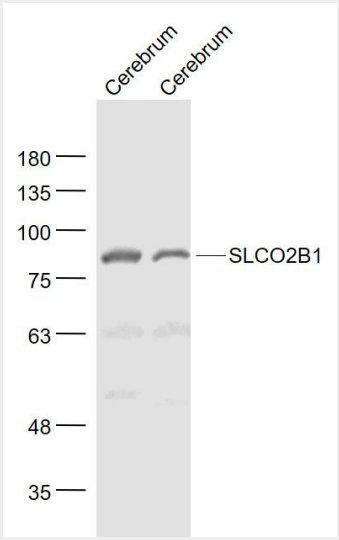
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLCO2B1 Polyclonal Antibody - Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-SLCO2B1 Polyclonal Antibody, Unconjugated(bs-3913R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Sample:
Cerebrum (Mouse) Lysate at 40 ug
Cerebrum (Rat) Lysate at 40 ug
Primary: Anti- SLCO2B1 (bs-3913R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 77 kD
Observed band size: 87 kD