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OATP2 Rabbit pAb

Catalog # AP99642

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Y6L6
Other Accession	Q9Y6L6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76449
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human OATP2
Epitope Specificity	101-200/691
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
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	This gene encodes a liver-specific member of the organic anion transporter family. The encoded 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. [provided by RefSeq, Mar 2009]

Additional Information

Gene ID	10599
Other Names	HBLRR; LST-1; LST1; OATP-C; OATP1B1; OATP2; OATPC; SLC21A6; SO1B1_HUMAN; SLCO1B1; Liver-specific organic anion transporter 1 (LST-1); Organic anion transporter SLC21A6; Sodium-independent organic anion-transporting polypeptide 2 (OATP-2); Solute carrier family 21 member 6; solute carrier organic anion transporter family member 1B1; solute carrier family 21 (organic anion transporter), member 6; solute carrier organic anion transporter family, member 1B1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C 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 °C.

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:10601278, PubMed:15159445, PubMed:15970799). 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: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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.