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Anti-OATP2 Antibody

Catalog # AP61003

Product Information

Application	WB, IHC
Primary Accession	Q9Y6L6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76449

Additional Information

Gene ID	10599
Other Names	LST1; OATP1B1; OATP2; OATPC; SLC21A6; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human OATP2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

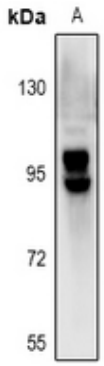
Cellular Location

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

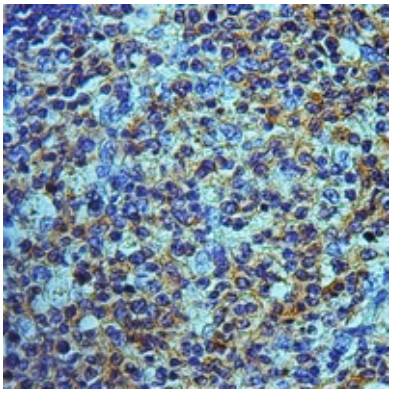
Highly expressed in liver, at the basolateral membranes of centrilobular hepatocytes (PubMed:10358072, PubMed:10601278, PubMed:10873595, PubMed:12196548, PubMed:22232210) Expressed in liver (at protein level) (PubMed:15159445). Expressed in fetal liver (PubMed:10873595). Not detected in heart, brain,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

Images



Western blot analysis of OATP2 expression in LO2 (A) whole cell lysates. (Predicted band size: 76 kD; Observed band size: 90 kD)

Immunohistochemical analysis of OATP2 staining in human tonsil cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated



compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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