

OATP1 Polyclonal Antibody Catalog # AP71404

Specification

OATP1 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P46721
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

OATP1 Polyclonal Antibody - Additional Information

Gene ID 6579

Other Names

SLCO1A2; OATP; OATP1; OATP1A2; SLC21A3; Solute carrier organic anion transporter family member 1A2; OATP-A; Organic anion-transporting polypeptide 1; OATP-1; Sodium-independent organic anion transporter; Solute carrier family 21 member 3

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
IHC P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

OATP1 Polyclonal Antibody - Protein Information

Name SLCO1A2

Synonyms OATP, OATP1, OATP1A2, SLC21A3

Function

Na⁽⁺⁾-independent transporter that mediates the cellular uptake of a broad range of organic anions such as the endogenous bile salts cholate and deoxycholate, either in their unconjugated or conjugated forms (taurocholate and glycocholate), at the plasmam membrane (PubMed:19129463, PubMed:7557095). Responsible for intestinal absorption of bile acids (By similarity). Transports dehydroepiandrosterone 3-sulfate (DHEAS), a major circulating steroid secreted by the adrenal cortex, as well as estrone 3-sulfate and 17beta-estradiol 17-O-(beta-D-glucuronate) (PubMed:11159893, PubMed:12568656, PubMed:>19129463, PubMed:>23918469, PubMed:>25560245, PubMed:>9539145). Mediates apical uptake of all-trans-retinol (atROL) across human retinal pigment epithelium, which is essential to maintaining the integrity of the visual cycle and thus vision (PubMed:>25560245). Involved in the uptake of clinically used drugs (PubMed:>17301733, PubMed:>20686826, PubMed:>27777271). Capable of thyroid hormone transport (both T3 or 3,3',5'-triiodo-L-thyronine, and T4 or L- tyroxine) (PubMed:>19129463, PubMed:>20358049). Also transports prostaglandin E2 (PubMed:>19129463). Plays roles in blood-brain and -cerebrospinal fluid barrier transport of organic anions and signal mediators, and in hormone uptake by neural cells (By similarity). May also play a role in the reuptake of neuropeptides such as substance P/TAC1 and vasoactive intestinal peptide/VIP released from retinal neurons (PubMed:>25132355). May play an important role in plasma and tissue distribution of the structurally diverse chemotherapeutic drugs methotrexate and paclitaxel (PubMed:>23243220). 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:>19129463). Hydrogencarbonate/HCO₃(-) acts as the probable counteranion that exchanges for organic anions (PubMed:>19129463). May contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (Probable).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein. Note=Localized to the basal membrane of Sertoli cells.

Tissue Location

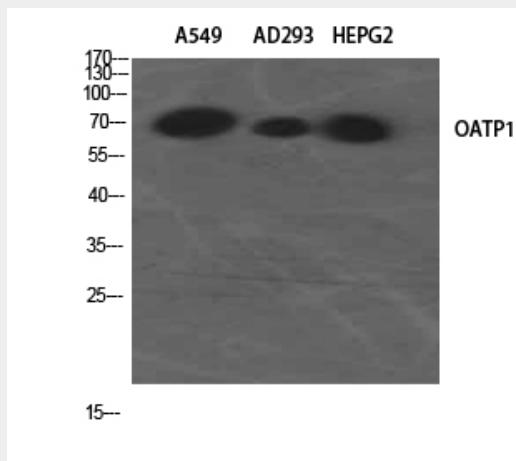
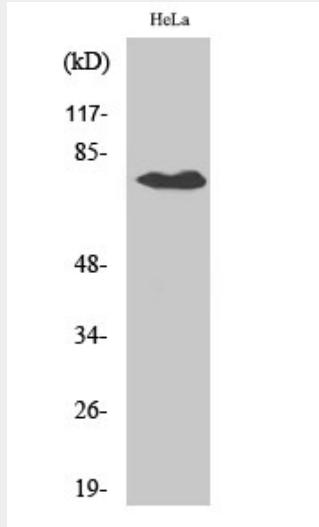
Higher expression in the brain than in liver and kidney (PubMed:15632119, PubMed:7557095, PubMed:9539145). Expressed in brain neurons in both cortex and hippocampus (PubMed:10873595, PubMed:25132355). Expressed in placental trophoblasts (PubMed:12409283). Also expressed in lung and testes at lower levels (PubMed:7557095). Expressed in the eye (at protein level) (PubMed:25560245). Expressed in the retina in the outer and inner nuclear layers, the inner plexiform layer and the ganglion cell layer (PubMed:25132355). Expressed in liver and prostate (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). Expressed in fetal brain and liver (PubMed:10873595).

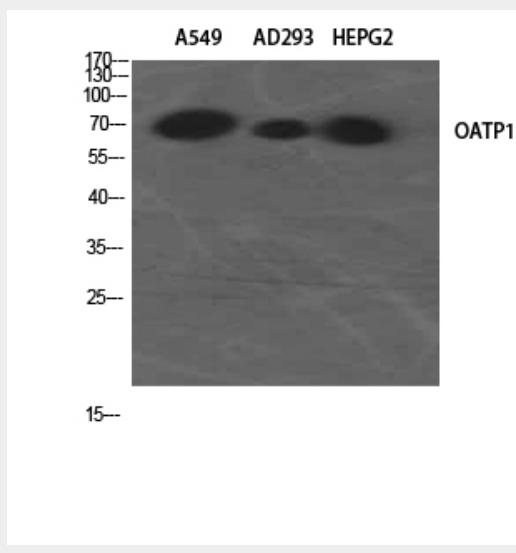
OATP1 Polyclonal Antibody - Protocols

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](#)

OATP1 Polyclonal Antibody - Images



OATP1 Polyclonal Antibody - Background

Mediates the Na⁽⁺⁾-independent transport of organic anions such as sulfobromophthalein (BSP) and conjugated (taurocholate) and unconjugated (cholate) bile acids (By similarity). Selectively inhibited by the grapefruit juice component naringin.