

OATP1 Polyclonal Antibody
Catalog # AP71404**Specification****OATP1 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P46721
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

OATP1 Polyclonal Antibody - Additional Information**Gene ID** 6579**Other Names**

SLC01A2; 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.

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** SLC01A2**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:19129463).

[23918469](http://www.uniprot.org/citations/23918469), PubMed: [25560245](http://www.uniprot.org/citations/25560245), PubMed: [9539145](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25560245)). Involved in the uptake of clinically used drugs (PubMed: [17301733](http://www.uniprot.org/citations/17301733), PubMed: [20686826](http://www.uniprot.org/citations/20686826), PubMed: [27777271](http://www.uniprot.org/citations/27777271)). Capable of thyroid hormone transport (both T3 or 3,3',5'-triiodo-L-thyronine, and T4 or L- tyroxine) (PubMed: [19129463](http://www.uniprot.org/citations/19129463), PubMed: [20358049](http://www.uniprot.org/citations/20358049)). Also transports prostaglandin E2 (PubMed: [19129463](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25132355)). May play an important role in plasma and tissue distribution of the structurally diverse chemotherapeutic drugs methotrexate and paclitaxel (PubMed: [23243220](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/19129463)). Hydrogencarbonate/HCO₃⁻ acts as the probable counteranion that exchanges for organic anions (PubMed: [19129463](http://www.uniprot.org/citations/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

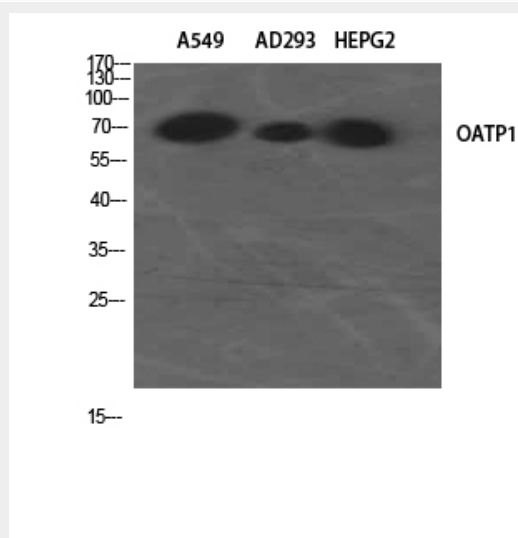
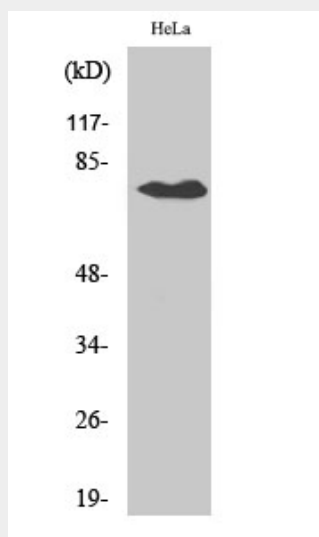
Higher expression in the brain than in liver and kidney (PubMed:15632119, PubMed:7557095, PubMed:9539145). Expressed in brain neurons in both cortex and hippocampus (PubMed:10873595, PubMed:25132355). Expressed in placental trophoblasts (PubMed:12409283). Also expressed in lung and testes at lower levels (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).

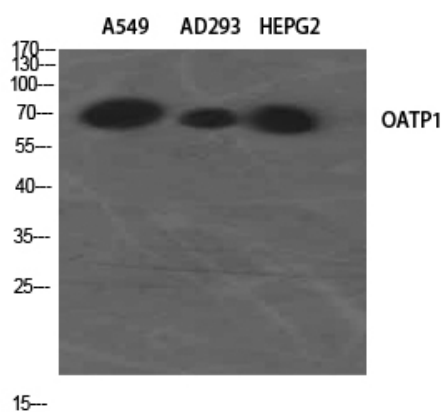
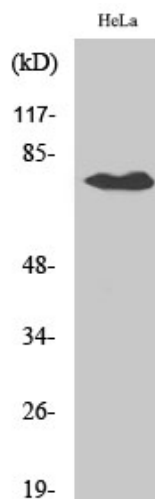
OATP1 Polyclonal Antibody - Protocols

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.