

Anti-OATP1 Antibody
Rabbit polyclonal antibody to OATP1
Catalog # AP59701**Specification**

Anti-OATP1 Antibody - Product Information

Application	WB, IP
Primary Accession	P46721
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74145

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

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

Target/Specificity

Recognizes endogenous levels of OATP1 protein.

Dilution

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

IP~~N/A

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-OATP1 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 plasmamembrane (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).

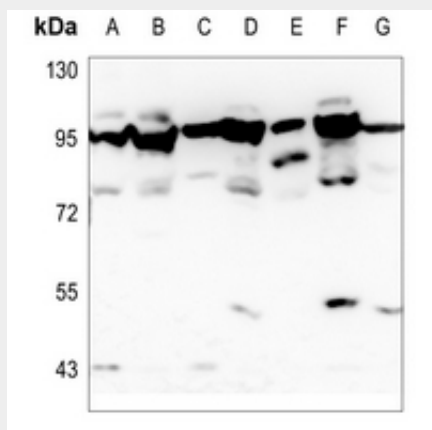
Anti-OATP1 Antibody - Protocols

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](#)

Anti-OATP1 Antibody - Images



Western blot analysis of OATP1 expression in HEK293T (A), PC12 (B), U2OS (C), mouse testis (D), mouse kidney (E), rat testis (F), rat kidney (G) whole cell lysates.

Anti-OATP1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human OATP1. The exact sequence is proprietary.