10320 Camino Santa Fe, Suite G
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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
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human OATP1. The exact sequence is proprietary.

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 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:<a

href="http://www.uniprot.org/citations/7557095" target="_blank">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.

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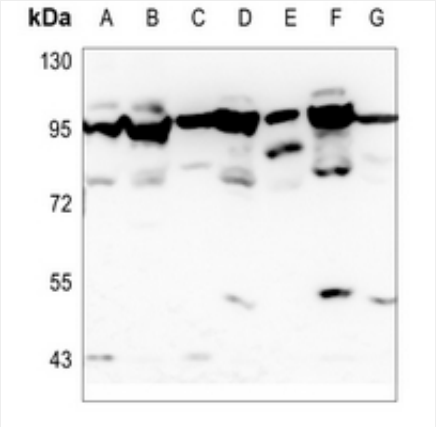
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

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