

SLC10A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5710B

Specification

SLC10A1 Antibody (C-term) - Product Information

Application WB, FC, E **Primary Accession** 014973 NP 003040.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 316-343

SLC10A1 Antibody (C-term) - Additional Information

Gene ID 6554

Other Names

Sodium/bile acid cotransporter, Cell growth-inhibiting gene 29 protein, Na(+)/bile acid cotransporter, Na(+)/taurocholate transport protein, Sodium/taurocholate cotransporting polypeptide, Solute carrier family 10 member 1, SLC10A1, NTCP

Target/Specificity

This SLC10A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 316-343 amino acids of human SLC10A1.

Dilution

WB~~1:1000 FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SLC10A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC10A1 Antibody (C-term) - Protein Information

Name SLC10A1



Synonyms NTCP

Function As a major transporter of conjugated bile salts from plasma into the hepatocyte, it plays a key role in the enterohepatic circulation of bile salts necessary for the solubilization and absorption of dietary fat and fat-soluble vitamins (PubMed:8132774, PubMed:14660639, PubMed:24867799, PubMed:34060352). It is strictly dependent on the extracellular presence of sodium (PubMed:8132774, PubMed:14660639, PubMed:24867799, PubMed:34060352). It exhibits broad substrate specificity and transports various bile acids, such as taurocholate, cholate, as well as non-bile acid organic compounds, such as estrone sulfate (PubMed:14660639, PubMed:34060352). Works collaboratively with the ileal transporter (NTCP2), the organic solute transporter (OST), and the bile salt export pump (BSEP), to ensure efficacious biological recycling of bile acids during enterohepatic circulation (PubMed:33222321).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

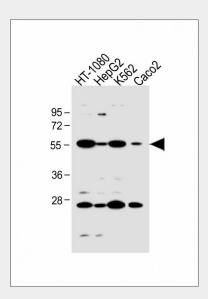
Expressed in liver (PubMed:11031103, PubMed:12409283). Expressed in placental trophoblasts (PubMed:12409283).

SLC10A1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

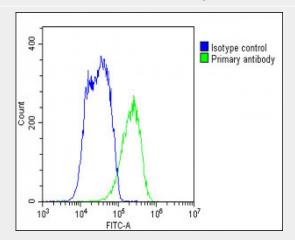
SLC10A1 Antibody (C-term) - Images



All lanes: Anti-SLC10A1 Antibody (C-term) at 1:1000 dilution Lane 1: HT-1080 whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: K562 whole cell lysate Lane 4: Caco2 whole cell lysate



Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HepG2 cells stained with AP5710b(green line). The cells were fixed with 2% paraformaldehyde 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP5710b, 1:25 dilution) for 60 min at 37° C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37° C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.

SLC10A1 Antibody (C-term) - Background

Sodium/bile acid cotransporters are integral membrane glycoproteins that participate in the enterohepatic circulation of bile acids. Two homologous transporters are involved in the reabsorption of bile acids, one absorbing from the intestinal lumen, the bile duct, and the kidney with an apical localization (SLC10A2; MIM 601295), and the other being found in the basolateral membranes of hepatocytes (SLC10A1).

SLC10A1 Antibody (C-term) - References

Ho, R.H., et al. J. Biol. Chem. 279(8):7213-7222(2004) Trauner, M., et al. Physiol. Rev. 83(2):633-671(2003) Hallen, S., et al. Biochemistry 41(23):7253-7266(2002) Shiao, T., et al. Genomics 69(2):203-213(2000) Hagenbuch, B., et al. J. Clin. Invest. 93(3):1326-1331(1994) SLC10A1 Antibody (C-term) - Citations

• <u>Core-fucosylation plays a pivotal role in hepatitis B pseudo virus infection: a possible implication for HBV glycotherapy.</u>