10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC10A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5710B

Product Information

Application	WB, FC, E
Primary Accession	Q14973
Other Accession	NP_003040.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	38119
Antigen Region	316-343

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~~1:2000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

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:14660639, PubMed:24867799, PubMed:34060352, PubMed:8132774). It is strictly dependent on the extracellular presence of sodium (PubMed:14660639, PubMed:24867799, PubMed:34060352, PubMed:8132774). 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).

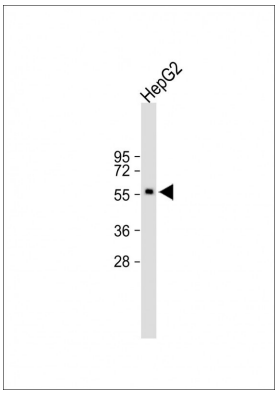
Background

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).

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)

Images



All lanes : Anti-SLC10A1 Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 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 : 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

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