

Anti-SLC10A1 Antibody

Catalog # ABO10985

### Specification

# Anti-SLC10A1 Antibody - Product Information

ApplicationWB, IHC-PPrimary Accession014973HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Sodium/bile acid cotransporter(SLC10A1) detection. Tested withWB, IHC-P in Human; Mouse; Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-SLC10A1 Antibody - 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

Calculated MW 38119 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br> <br> Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse <br>

Subcellular Localization Membrane; Multi-pass membrane protein.

Protein Name Sodium/bile acid cotransporter

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence in the middle region of human SLC10A1(141-154aa YSRGIYDGDLKDKV), different from the related rat and mouse sequences by one amino acid.

Purification

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Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

### Anti-SLC10A1 Antibody - 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:<a href="http://www.uniprot.org/citations/14660639" target=" blank">14660639</a>, PubMed:<a href="http://www.uniprot.org/citations/24867799" target=" blank">24867799</a>, PubMed:<a href="http://www.uniprot.org/citations/34060352" target=" blank">34060352</a>, PubMed:<a href="http://www.uniprot.org/citations/8132774" target=" blank">8132774</a>). It is strictly dependent on the extracellular presence of sodium (PubMed:<a href="http://www.uniprot.org/citations/14660639" target=" blank">14660639</a>, PubMed:<a href="http://www.uniprot.org/citations/24867799" target=" blank">24867799</a>, PubMed:<a href="http://www.uniprot.org/citations/34060352" target=" blank">34060352</a>, PubMed: <a href="http://www.uniprot.org/citations/8132774" target=" blank">8132774</a>). 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:<a href="http://www.uniprot.org/citations/14660639" target=" blank">14660639</a>, PubMed:<a href="http://www.uniprot.org/citations/34060352" target="blank">34060352</a>). 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: <a href="http://www.uniprot.org/citations/33222321" target="\_blank">33222321</a>).

**Cellular Location** Cell membrane; Multi-pass membrane protein

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

# Anti-SLC10A1 Antibody - Protocols

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

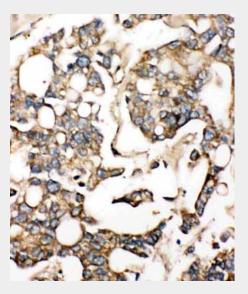
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>



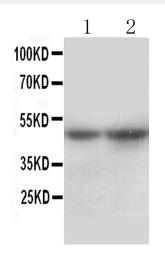
## Immunoprecipitation

- Flow Cytomety
- <u>Cell Culture</u>

Anti-SLC10A1 Antibody - Images



Anti-SLC10A1 antibody, ABO10985, IHC(P)IHC(P): Human Liver Cancer Tissue



Anti-SLC10A1 antibody, ABO10985, Western blottingAll lanes: Anti SLC10A1 (ABO10985) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Mouse Liver Tissue Lysate at 50ugPredicted bind size: 38-56KDObserved bind size: 49KD

## Anti-SLC10A1 Antibody - Background

Na+-taurocholate cotransporting polypeptide (NTCP), also known as SLC10A1 (Solute carrier family 10, member 1), is the major bile acid uptake system in human hepatocytes. NTCP and the ileal transporter ASBT (apical sodium-dependent bile acid transporter) are two sodium-dependent transporters critical for the enterohepatic circulation of bile acids. The hASBT gene is known to be activated by the glucocorticoid receptor (GR). Ho RH et al. indicates functionally important polymorphisms in NTCP exist and that the like lihood of being carriers of such polymorphisms is dependent on ethnicity.