Datasheet for 600-401-P84

SLC10A1 Antibody

Overview

Description:	Anti-SLC10A1 (RABBIT) Antibody - 600-401-P84
Item No.:	600-401-P84
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	SLC10A1(SOLUTE CARRIER FAMILY 10 (SODIUM/BILE ACID COTRANSPORTER FAMILY), MEMBER 1),also called NTCP or NTCP1,is found in the basolateral membranes of hepatocytes, which is also involved in the reabsorption of bile acids. The SLC10A1 gene is mapped on 14q24.2.The SLC10A1 gene contains 5 exons and spans about 23 kb. Like other sodium/bile acid transporters, SLC10A1 contains an exoplasmic N terminus, an odd number of transmembrane regions, and a cytoplasmic C terminus. Two amphipathic sequences are critical for intramolecular interactions and for proper trafficking of SLC10A1 to the plasma membrane. Injection of in vitro transcribed NTCP cRNA into Xenopus oocytes resulted in the expression of Na(+)-dependent taurocholate uptake. NTCP-mediated taurocholate uptake in oocytes was inhibited by all major bile acid derivatives and by bromosulfophthalein. This antibody is suitable for researchers interested in cancer research.
Synonyms:	Cell growth-inhibiting gene 29 protein, Na(+)/bile acid cotransporter, Na(+)/taurocholate transport protein, Sodium/taurocholate cotransporting polypeptide, Solute carrier family 10 member 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SLC10A1
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	SLC10A1 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human SLC10A1.
Purity/Specificity:	Anti-SLC10A1 antibody is directed against human SLC10A1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, and rat based on homology for the immunogen sequence. Cross reactivity with SLC10A1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q14973 • GeneID - 6554 • NCBI - NP_003040.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-SLC10A1 is tested for Immunohistochemistry -P and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~38.1kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100-1:500
WB:	0.5µg/mL

Formulation

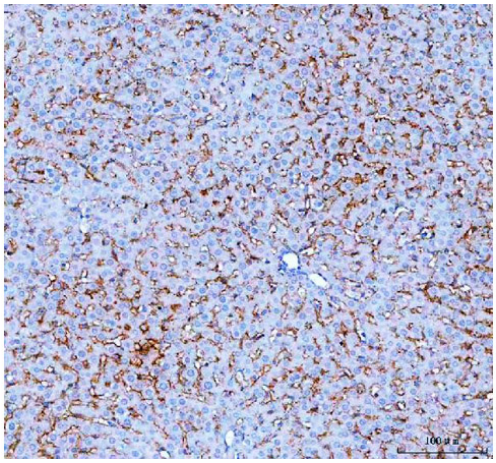
Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Stabilizer:	4mg Trehalose
Reconstitution Volume:	200µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

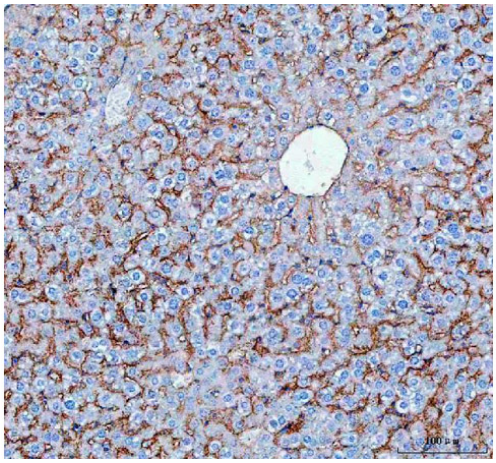
Shipping Condition:	Ambient

Storage Condition:	Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. Each vial contains 0.9 mg NaCl, 0.2 mg Na2HPO4, and 4 mg Trehalose.
Expiration:	Expiration date is one (1) year from date of receipt.

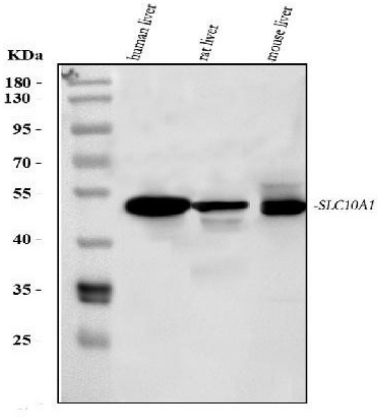
Images



Immunohistochemistry
Immunohistochemistry analysis of SLC10A1 using anti-SLC10A1 antibody.
SLC10A1 was detected in a paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-SLC10A1 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



Immunohistochemistry
Immunohistochemistry analysis of SLC10A1 using anti-SLC10A1 antibody.
SLC10A1 was detected in a paraffin-embedded section of mouse liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-SLC10A1 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



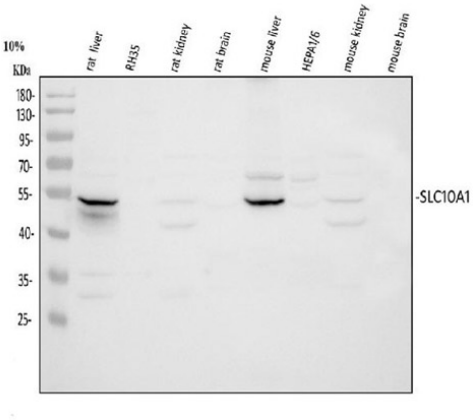
Western Blot

Western blot analysis of SLC10A1 using anti-SLC10A1 antibody.

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30µg of sample under reducing conditions.

Lane 1: human liver tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-SLC10A1 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SLC10A1 at approximately 50 kDa. The expected band size for SLC10A1 is at 38 kDa.



Western Blot

Western blot analysis of SLC10A1 using anti-SLC10A1 antibody.

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30µg of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: rat RH35 whole cell lysates, Lane 3: rat kidney tissue lysates, Lane 4: rat brain tissue lysates, Lane 5: mouse liver tissue lysates, Lane 6: mouse HEPA1-6 whole cell lysates, Lane 7: mouse kidney tissue lysates, Lane 8: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-SLC10A1 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SLC10A1 at approximately 50 kDa. The expected band size for SLC10A1 is at 38 kDa.

Disclaimer