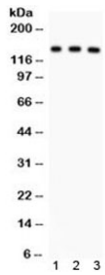
ABCB11 Antibody / Bile Salt Export Pump / BSEP (R31844)

Catalog No.	Formulation	Size
R31844	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

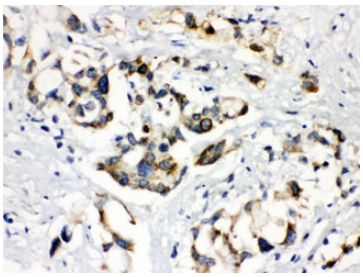
Citations (2)

Bulk quote request

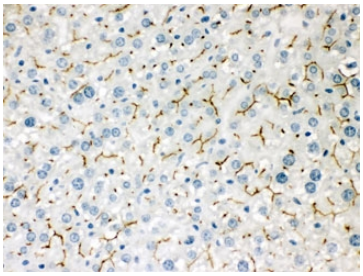
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O95342
RRID	AB_2725751
Localization	Membrane
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunofluorescence (FFPE) : 1-2ug/ml
Limitations	This ABCB11 antibody is available for research use only.



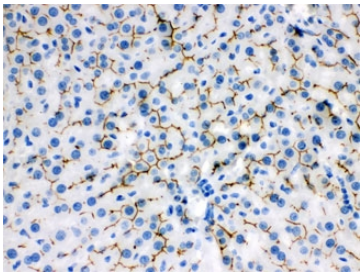
Western blot testing of 1) rat liver, 2) mouse liver and 3) human SMMC lysate with ABCB11 antibody. Expected/observed molecular weight ~146 kDa.



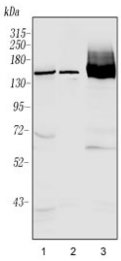
IHC testing of FFPE human liver cancer with ABCB11 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



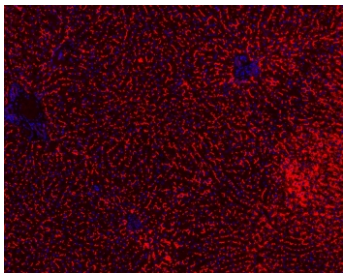
IHC testing of FFPE mouse liver with ABCB11 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



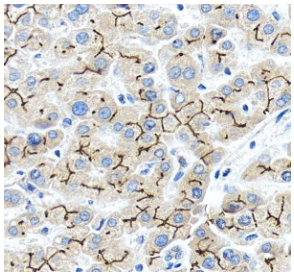
IHC testing of FFPE rat liver with ABCB11 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



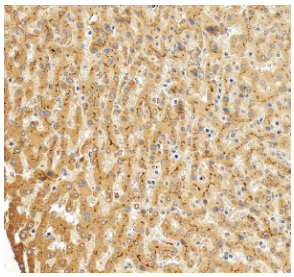
Western blot testing of 1) human HCCT 2) rat liver and 3) mouse liver lysate with ABCB11 antibody. Expected/observed molecular weight ~146 kDa.



Immunofluorescent staining of FFPE mouse liver with ABCB11 antibody (red) and DAPI counterstain (blue). HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



ABCB11 Antibody Canalicular Human Liver IHC. Immunohistochemical staining of FFPE human liver tissue using ABCB11 Antibody / Bile Salt Export Pump Antibody at 2 ug/ml. An HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB substrate was used for detection. ABCB11 Antibody demonstrates strong canalicular membranous staining outlining adjacent hepatocytes in a characteristic chicken-wire pattern, consistent with the normal localization of the bile salt export pump in liver tissue.



ABCB11 Antibody Human Liver IHC. Immunohistochemical staining of FFPE human liver tissue using ABCB11 Antibody / Bile Salt Export Pump Antibody at 2 ug/ml. An HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB substrate was used for detection. ABCB11 Antibody demonstrates strong membranous staining of hepatocytes, consistent with canalicular localization of the bile salt export pump, with minimal background staining in the surrounding liver tissue.

Description

ABCB11 antibody targets ATP binding cassette subfamily B member 11, commonly known as the Bile Salt Export Pump (BSEP). ABCB11 is a canalicular membrane protein predominantly localized to the apical membrane of hepatocytes, where it functions as a primary transporter responsible for the ATP dependent secretion of bile acids from hepatocytes into bile. This transport step is essential for normal bile formation, enterohepatic circulation of bile acids, and overall hepatic detoxification capacity. ABCB11 is a member of the ATP binding cassette transporter family and specifically belongs to the ABCB subfamily of full transporters.

The Bile Salt Export Pump is expressed almost exclusively in the liver, with highest expression in differentiated hepatocytes. At the cellular level, ABCB11 localizes to the canalicular membrane domain, where it cooperates with other canalicular transporters to maintain bile flow and bile acid homeostasis. ABCB11 antibody reagents are therefore widely used in liver biology, hepatocyte polarity studies, and investigations of canalicular membrane integrity.

Functionally, ABCB11 plays a critical role in preventing intracellular accumulation of bile acids, which can be cytotoxic when retained within hepatocytes. By actively transporting bile salts into bile canaliculi, the Bile Salt Export Pump protects hepatocytes from bile acid induced stress and supports normal digestive processes. Disruption of ABCB11 function leads to impaired bile secretion and cholestatic liver injury. A short functional summary is that ABCB11 is the primary efflux transporter driving bile acid secretion at the hepatocyte canalicular membrane and is indispensable for physiologic bile flow.

From a genetic and clinical perspective, ABCB11 is well known for its association with inherited and acquired cholestatic liver diseases. Loss of function or reduced expression of ABCB11 has been linked to progressive familial intrahepatic cholestasis type 2, benign recurrent intrahepatic cholestasis, and drug induced cholestasis. Changes in ABCB11 expression and localization are also observed in obstructive cholestasis, viral hepatitis, and certain forms of hepatocellular carcinoma. Because of these associations, ABCB11 antibody tools are frequently used to assess transporter expression, canalicular membrane organization, and disease related alterations in liver tissue.

ABCB11 participates in bile acid dependent signaling pathways indirectly by regulating bile acid availability within the enterohepatic circulation. Altered ABCB11 activity can influence downstream nuclear receptor signaling, including pathways controlled by farnesoid X receptor, which governs bile acid synthesis and transport gene expression. Developmental studies show that ABCB11 expression increases with hepatocyte maturation, consistent with its specialized role in adult liver physiology.

At the protein level, ABCB11 contains two nucleotide binding domains and multiple transmembrane helices typical of full ABC transporters. These structural features enable ATP driven conformational changes required for bile salt translocation across the canalicular membrane. ABCB11 antibody reagents are used in research applications to examine protein expression, subcellular localization, and changes associated with disease or experimental manipulation. A research grade ABCB11 antibody is suitable for detecting Bile Salt Export Pump expression in liver derived samples and hepatocyte-based model systems. ABCB11 antibodies from NSJ Bioreagents are supplied for research use to support studies of hepatic transport, cholestasis, and bile acid biology.

Explore additional Metabolism Antibodies for proteins involved in bile acid transport, hepatic metabolism, ATP-dependent

transporters, and other essential metabolic pathways.

Application Notes

Optimal dilution of the ABCB11 antibody should be determined by the researcher.

Immunogen

Amino acids KYGDNTKEIPMERVIAAAKQAQLHD of human ABCB11 were used as the immunogen for the ABCB11 antibody.

Storage

After reconstitution, the ABCB11 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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