

#### ABCB11 Rabbit pAb

ABCB11 Rabbit pAb Catalog # AP93992

#### **Specification**

## **ABCB11 Rabbit pAb - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen
Epitope Specificity
Isotype
Purity

affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION SIMILARITY

SUBUNIT DISEASE WB <u>Q9QY30</u> Mouse Rabbit Polyclonal 146 KDa Liquid

Recombinant mouse ABCB11 protein

616-750/1321

IaG

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Membrane; Multi-pass membrane protein.
Belongs to the ABC transporter superfamily. ABCB family. Multidrug resistance exporter (TC 3.A.1.201) subfamily. Contains 2 ABC transmembrane type-1 domains. Contains 2 ABC transporter domains. Interacts with HAX1.
Defects in ABCB11 are the cause of progressive familial intrahepatic cholestasis type 2 (PFIC2) [MIM:601847]. PFIC2 is an inherited liver disease of childhood which is characterized by cholestasis and normal serum

cholestasis and normal serum gamma-glutamyltransferase activity. Defects in ABCB11 are also found in cases of chronic intrahepatic cholestasis without obvious familial history of chronic liver disease. Defects in ABCB11 are the cause of benign recurrent intrahepatic cholestasis type 2 (BRIC2) [MIM:605479]. **BRIC** is characterized by intermittent episodes of cholestasis without progression to liver failure. There is initial elevation of serum bile acids, followed by cholestatic iaundice which generally spontaneously resolves after periods of weeks to months. The cholestatic attacks vary in severity and duration and patients

are asymptomatic between episodes, both



## Important Note

clinically and biochemically. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

# **Background Descriptions**

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra-and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is the major canalicular bile salt export pump in man. Mutations in this gene cause a form of progressive familial intrahepatic cholestases which are a group of inherited disorders with severe cholestatic liver disease from early infancy. [provided by RefSeq, Jul 2008]

## ABCB11 Rabbit pAb - Additional Information

**Gene ID 27413** 

#### **Other Names**

Bile salt export pump {ECO:0000303|Ref.4}, 7.6.2.-, ATP-binding cassette sub-family B member 11, Sister of P-glycoprotein, Abcb11 {ECO:0000312|MGI:MGI:1351619}

#### Target/Specificity

Expressed predominantly, if not exclusively in the liver, where it was further localized to the canalicular microvilli and to subcanalicular vesicles of the hepatocytes by in situ.

#### **Dilution**

<span class ="dilution WB">WB~~1:1000</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

## **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **ABCB11 Rabbit pAb - Protein Information**

Name Abcb11 {ECO:0000312|MGI:MGI:1351619}

## **Function**

Catalyzes the transport of the major hydrophobic bile salts, such as taurine and glycine-conjugated cholic acid across the canalicular membrane of hepatocytes in an ATP-dependent manner, therefore participates in hepatic bile acid homeostasis and consequently to lipid homeostasis through regulation of biliary lipid secretion in a bile salts dependent manner (PubMed:<a href="http://www.uniprot.org/citations/11172067" target="\_blank">11172067</a>, PubMed:<a href="http://www.uniprot.org/citations/14570929" target="\_blank">14570929</a>, PubMed:<a href="http://www.uniprot.org/citations/19228692" target="\_blank">19228692</a>, PubMed:<a href="http://www.uniprot.org/citations/22619174" target="\_blank">22619174</a>, PubMed:<a href="http://www.uniprot.org/citations/23764895" target="\_blank">23764895</a>). Transports taurine-conjugated bile salts more rapidly than glycine- conjugated bile salts (By similarity). Also transports non-bile acid compounds, such as pravastatin and fexofenadine in an ATP-dependent manner and may be involved in their biliary excretion (By similarity).



#### **Cellular Location**

Apical cell membrane {ECO:0000250|UniProtKB:O70127}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O70127}. Recycling endosome membrane {ECO:0000250|UniProtKB:O70127}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O70127}. Endosome {ECO:0000250|UniProtKB:O70127}. Cell membrane {ECO:0000250|UniProtKB:O70127}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O70127}. Note=Internalized at the canalicular membrane through interaction with the adapter protein complex 2 (AP-2) At steady state, localizes in the canalicular membrane but is also present in recycling endosomes. ABCB11 constantly and rapidly exchanges between the two sites through tubulo-vesicles carriers that move along microtubules. Microtubule-dependent trafficking of ABCB11 is enhanced by taurocholate and cAMP and regulated by STK11 through a PKA-mediated pathway. Trafficking of newly synthesized ABCB11 through endosomal compartment to the bile canalicular membrane is accelerated by cAMP but not by taurocholate (By similarity). Cell membrane expression is up- regulated by short- and medium-chain fatty acids (By similarity) {ECO:0000250|UniProtKB:070127, ECO:0000250|UniProtKB:095342}

#### **Tissue Location**

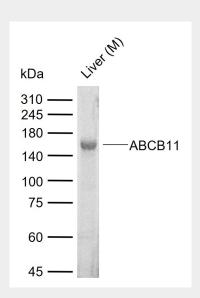
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## **ABCB11** Rabbit pAb - Protocols

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

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

## ABCB11 Rabbit pAb - Images



Sample: Lane 1: Mouse Liver tissue lysates Primary: Anti-ABCB11 (AP93992) at 1/1000 dilution







Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 146 kDa Observed band size: 146 kDa

# ABCB11 Rabbit pAb - Background

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