

Anti-ABCB11 Picoband Antibody

Catalog # ABO12104

Specification

Anti-ABCB11 Picoband Antibody - Product Information

Application WB, IHC-P
Primary Accession O95342
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Bile salt export pump(ABCB11) detection. Tested with WB, IHC-P in Human: Mouse: Rat.

Reconstitution

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

Anti-ABCB11 Picoband Antibody - Additional Information

Gene ID 8647

Other Names

Bile salt export pump, ATP-binding cassette sub-family B member 11, ABCB11, BSEP

Calculated MW

146407 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat
br>Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
br>

Subcellular Localization

Membrane; Multi-pass membrane protein.

Tissue 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.

Protein Name

Bile salt export pump

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ABCB11 (1175-1199aa KYGDNTKEIPMERVIAAAKQAQLHD), different from the related mouse and rat sequences by three amino acids.



Purification Immunogen affinity purified.

Cross ReactivityNo 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.

Sequence Similarities

Belongs to the ABC transporter superfamily. ABCB family. Multidrug resistance exporter (TC 3.A.1.201) subfamily.

Anti-ABCB11 Picoband Antibody - Protein Information

Name ABCB11 (HGNC:42)

Synonyms BSEP {ECO:0000303|Ref.2}

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 $href="http://www.uniprot.org/citations/15791618" target="_blank">15791618, PubMed:16332456, PubMed:16332456, PubMed:16332456, PubMed:16332456, PubMed:<a$ href="http://www.uniprot.org/citations/18985798" target="blank">18985798, PubMed:19228692, PubMed:20010382, PubMed:20398791, PubMed:22262466, PubMed:24711118, PubMed:29507376, PubMed:19507075, PubMed:32203132). Transports taurine-conjugated bile salts more rapidly than glycine-conjugated bile salts (PubMed: 16332456). Also transports non-bile acid compounds, such as pravastatin and fexofenadine in an ATP-dependent manner and may be involved in their biliary excretion (PubMed: <a $href="http://www.uniprot.org/citations/15901796" \ target="blank">15901796, PubMed:<a https://www.uniprot.org/citations/15901796" target="blank">15901796, PubMed:<a https://www.uniprot.org/citations/15901796$ href="http://www.uniprot.org/citations/18245269" target="_blank">18245269).

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Recycling endosome membrane {ECO:0000250|UniProtKB:O70127}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O70127}. Endosome {ECO:0000250|UniProtKB:O70127}. Cell membrane; Multi-pass membrane protein. Note=Internalized at the canalicular membrane through interaction with the adapter protein complex 2 (AP-2) (PubMed:22262466). 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 (PubMed:20398791) {ECO:0000250|UniProtKB:O70127, ECO:0000269|PubMed:20398791, ECO:0000269|PubMed:22262466}

Tissue Location

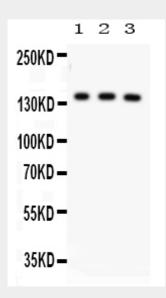
Expressed predominantly, if not exclusively in the liver, where it was further localized to the canalicular microvilli and to subcanalicular vesicles of the hepatocytes by in situ

Anti-ABCB11 Picoband Antibody - Protocols

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

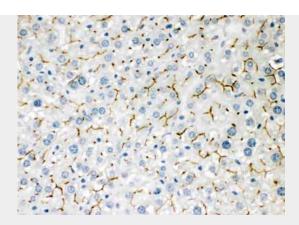
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-ABCB11 Picoband Antibody - Images

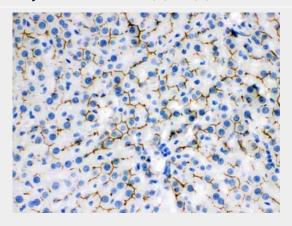


Anti- ABCB11 Picoband antibody, ABO12104, Western blottingAll lanes: Anti ABCB11 (ABO12104) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Mouse Liver Tissue Lysate at 50ugLane 3: SMMC Whole Cell Lysate at 40ugPredicted bind size: 146KDObserved bind size: 146KD

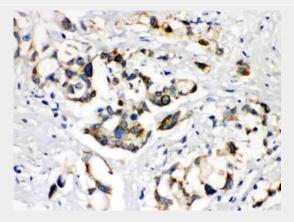




Anti- ABCB11 Picoband antibody, ABO12104, IHC(P)IHC(P): Mouse Liver Tissue



Anti- ABCB11 Picoband antibody, ABO12104, IHC(P)IHC(P): Rat Liver Tissue



Anti- ABCB11 Picoband antibody, ABO12104, IHC(P)IHC(P): Human Liver Cancer Tissue

Anti-ABCB11 Picoband Antibody - Background

Bile Salt Export Pump (BSEP) is a protein which in humans is encoded by the ABCB 11 gene. It is a member of the superfamily of ATP-binding cassette (ABC) transporters, also known as ABCB11. It is mapped to chromosome 2q24. The BSEP protein is mainly expressed in the liver. ABCB11 is a gene associated with progressive familial intrahepatic cholestasis type 2 (PFIC2) which caused by mutations in the ABCB11 gene will increases the risk of hepatocellular carcinoma in early life.