

Anti-MRP2/ABCC2 Antibody Picoband®

Catalog Number: A00974-1

About ABCC2

Multidrug resistance-associated protein 2 (MRP2), also called canalicular multispecific organic anion transporter 1 (cMOAT) or ATP-binding cassette sub-family C member 2 (ABCC2), is a protein that in humans is encoded by the ABCC2 gene. The 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 MRP subfamily which is involved in multi-drug resistance. This protein is expressed in the canalicular (apical) part of the hepatocyte and functions in biliary transport. Substrates include anticancer drugs such as vinblastine; therefore, this protein appears to contribute to drug resistance in mammalian cells. Several different mutations in this gene have been observed in patients with Dubin-Johnson syndrome (DJS), an autosomal recessive disorder characterized by conjugated hyperbilirubinemia.

Overview

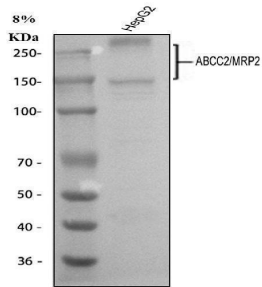
Product Name	Anti-MRP2/ABCC2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-MRP2/ABCC2 Antibody Picoband® catalog # A00974-1. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q92887

Technical Details

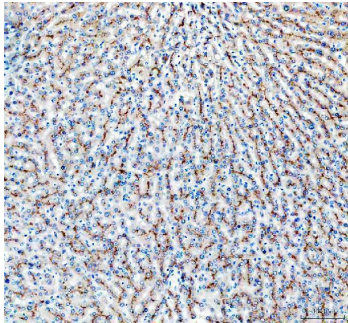
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human MRP2/ABCC2, which shares 77.1% and 71.4% amino acid (aa) sequence identity with mouse and rat MRP2/ABCC2, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.

Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

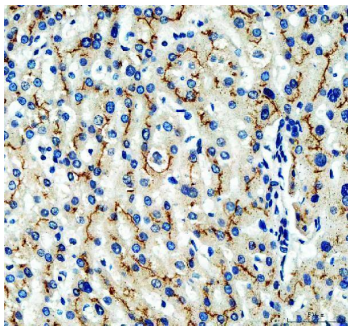
Anti-MRP2/ABCC2 Antibody Picoband® (A00974-1) Images



Western blot analysis of MRP2/ABCC2 using anti-MRP2/ABCC2 antibody (A00974-1). 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 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell 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 rabbit anti-MRP2/ABCC2 antigen affinity purified polyclonal antibody (Catalog # A00974-1) at 0.5 ug/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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MRP2/ABCC2 at approximately 170-250 kDa. The expected band size for MRP2/ABCC2 is at 174 kDa.



IHC analysis of MRP2/ABCC2 using anti-MRP2/ABCC2 antibody (A00974-1). MRP2/ABCC2 was detected in a paraffin-embedded section of human liver cancer 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 ug/ml rabbit anti-MRP2/ABCC2 Antibody (A00974-1) 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 (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of MRP2/ABCC2 using anti-MRP2/ABCC2 antibody (A00974-1). MRP2/ABCC2 was detected in a paraffin-embedded section of human liver cancer 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 ug/ml rabbit anti-MRP2/ABCC2 Antibody (A00974-1) 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 (Catalog # SV0002) with DAB as the chromogen.

7 Publications Citing This Product

1. PubMed ID: 10.1186/1479-5876-6-55, Lentivirus-mediated RNAi silencing targeting ABCC2 increasing the sensitivity of a human

nasopharyngeal carcinoma cell line against cisplatin

2. PubMed ID: 10.3892/ijo.2016.3442, Cisplatin-induced CCL5 secretion from CAFs promotes cisplatin-resistance in ovarian cancer via regulation of the STAT3 and PI3K/Akt signaling pathways

3. PubMed ID: 10.1155/2010/915046, Association of ABCC2 and CDDP-Resistance in Two Sublines Resistant to CDDP Derived from a Human Nasopharyngeal Carcinoma Cell Line

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Anti-MRP2/ABCC2 Antibody

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