

Anti-MRP1/ABCC1 Antibody Picoband™

Catalog Number: A00872-1

About ABCC1

Multidrug resistance-associated protein 1 (MRP1) is a protein that in humans is encoded by the ABCC1 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 full transporter is a member of the MRP subfamily which is involved in multi-drug resistance. This protein functions as a multispecific organic anion transporter, with oxidized glutathione, cysteinyl leukotrienes, and activated aflatoxin B1 as substrates. This protein also transports glucuronides and sulfate conjugates of steroid hormones and bile salts. Alternatively spliced variants of this gene have been described but their full-length nature is unknown.

Overview

Product Name	Anti-MRP1/ABCC1 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-MRP1/ABCC1 Antibody Picoband™ catalog # A00872-1. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P33527

Technical Details

Immunogen	E.coli-derived human MRP1/ABCC1 recombinant protein (Position: S239-K357).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5 ug/ml, Human Flow Cytometry, 1-3 ug/1x10⁶ cells, Human Direct ELISA, 0.1-0.5 ug/ml, Human

Anti-MRP1/ABCC1 Antibody Picoband™ (A00872-1) Images

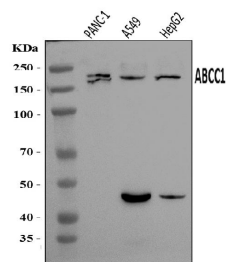


Figure 1. Western blot analysis of MRP1/ABCC1 using anti-MRP1/ABCC1 antibody (A00872-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human PANC-1 whole cell lysates, Lane 2: human A549 whole cell lysates, Lane 3: 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-MRP1/ABCC1 antigen affinity purified polyclonal antibody (Catalog # A00872-1) 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 MRP1/ABCC1 at approximately 220 kDa. The expected band size for MRP1/ABCC1 is at 220 kDa.

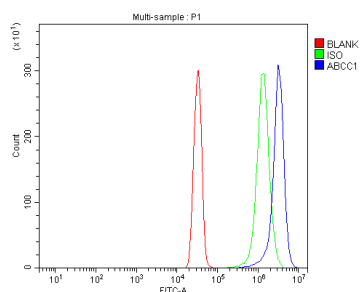


Figure 2. Flow Cytometry analysis of SiHa cells using anti-MRP1/ABCC1 antibody (A00872-1). Overlay histogram showing SiHa cells stained with A00872-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MRP1/ABCC1 Antibody (A00872-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

3 Publications Citing This Product

1. 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
2. PubMed ID: 10.1016/j.leukres.2016.10.003, Differential expression and response to arsenic stress of MRPs and ASAN1 determine sensitivity of classical multidrug-resistant leukemia cells to arsenic trioxide
3. PubMed ID: 10.1093/abbs/gmt062, Vascular endothelial growth factor induces multidrug resistance-associated protein 1 overexpression through phosphatidylinositol-3-kinase /protein kinase B signaling pathway and transcription factor specificity protein 1 in BGC823 cell line

Visit bosterbio.com/anti-mrp1-abcc1-picoband-trade-antibody-a00872-1.html to see all 3 publications.

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