

Anti-BCRP/ABCG2 Antibody Picoband®

Catalog Number: PA1869

About ABCG2

ABCG2 (Atp-binding cassette, subfamily g, member 2) also known as ABCP, BCRP or MRX, is a protein that in humans is encoded by the ABCG2 gene. The ABCG2 gene encodes a membrane transporter belonging to the ATP-binding cassette (ABC) superfamily of membrane transporters, which are involved in the trafficking of biologic molecules across cell membranes. The ABCG2 protein is also a high capacity transporter for uric acid excretion in the kidney, liver, and gut. The ABCG2 gene is mapped on 4q22.1. In vitro assays of isolated membrane preparations revealed a high-capacity, vanadate-sensitive ATPase activity associated with ABCG2 expression that was stimulated by compounds known to be transported by this protein. Ozvegy et al. (2001) concluded that ABCG2 is likely functioning as a homodimer or homooligomer in this expression system since it is unlikely that putative Sf9 transport partners would be overexpressed at similarly high levels. Abcg2 transports pheophorbide-a, which occurs in various plant-derived foods and food supplements and is highly efficient in limiting its uptake from ingested food. ABCG2 is a major factor in the concentrative transfer of drugs, carcinogens, and dietary toxins to the milk of mice, cows, and humans.

Overview

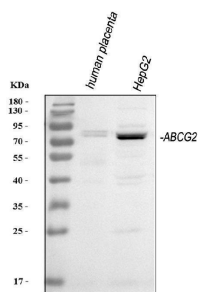
Product Name	Anti-BCRP/ABCG2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-BCRP/ABCG2 Antibody catalog # PA1869. Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	Q9UNQ0

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human BCRP/ABCG2.
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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	Western blot, 0.1-0.5ug/ml, Human

Anti-BCRP/ABCG2 Antibody Picoband® (PA1869) Images



Western blot analysis of BCRP/ABCG2 using anti-BCRP/ABCG2 antibody (PA1869). 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 placenta tissue lysates, Lane 2: 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-BCRP/ABCG2 antigen affinity purified polyclonal antibody (Catalog # PA1869) 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 BCRP/ABCG2 at approximately 75 kDa. The expected band size for BCRP/ABCG2 is at 72 kDa.

6 Publications Citing This Product

1. PubMed ID: 23426065, Li R, Wu X, Wei H, Tian S. *Oncol Lett.* 2013 Mar;5(3):877-883. Epub 2013 Jan 2. Characterization Of Side Population Cells Isolated From The Gastric Cancer Cell Line Sgc-7901.
2. PubMed ID: 26563263, Reversion of malignant phenotypes of human glioblastoma cells by γ -elemene through β -catenin-mediated regulation of stemness-, differentiation- and epithelial-to-mesenchymal transition-related molecules
3. PubMed ID: 22274587, Duan J, Mansour Hm, Zhang Y, Deng X, Chen Y, Wang J, Pan Y, Zhao J. *Int J Pharm.* 2012 Apr 15;426(1-2):193-201. Doi: 10.1016/J.Ijpharm.2012.01.020. Epub 2012 Jan 17. Reversion Of Multidrug Resistance By Co-Encapsulation Of Doxorubicin And Curcumin ...

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