BOSTER
antibody and ELISA experts

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Anti-MRP4/ABCC4 Antibody Picoband®

Catalog Number: PB9144

About ABCC4

ABCC4 (Atp-binding cassette, subfamily c, member 4) also known as MRP4 or MOATB, is a protein that in humans is encoded by the ABCC4 gene. It belongs to a large family of transmembrane proteins involved in active transport of substrates out of cells. This gene is mapped to chromosome 13q32. ABCC4 acts as an independent regulator of intracellular cyclic nucleotide levels and as a mediator of cAMP-dependent signal transduction to the nucleus. The antiproliferative effect of ABCC4 inhibition was related to cAMP-dependent PKA activation and CREB phosphorylation. Pharmacologic inhibition of ABCC4 activity or knockdown of ABCC4 via RNA interference resulted in reduced migration of DCs from human skin explants and of in vitro-generated Langerhans cells. It has been found that ABCC4 contributes to migration of DCs toward draining lymph nodes and therefore has a role in the initiation of an immune response.

Overview

Product Name	Anti-MRP4/ABCC4 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MRP4/ABCC4 Antibody Picoband® catalog # PB9144. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. 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 antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na2HPO4, and 0.05 mg NaN3. *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	O15439

Technical Details

Immunogen	E.coli-derived human MRP4 recombinant protein (Position: M1-P370).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

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	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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Western blot, 0.1-0.5ug/ml, Human

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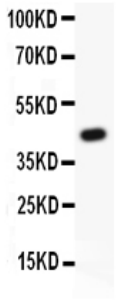
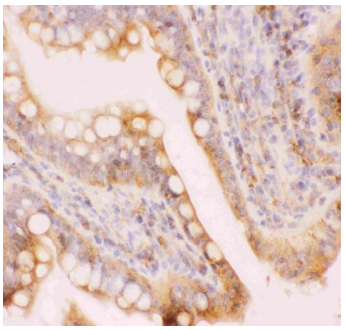
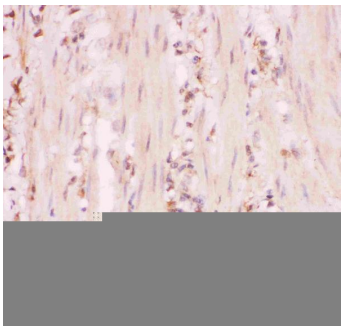
Anti-MRP4/ABCC4 Antibody Picoband® (PB9144) Images



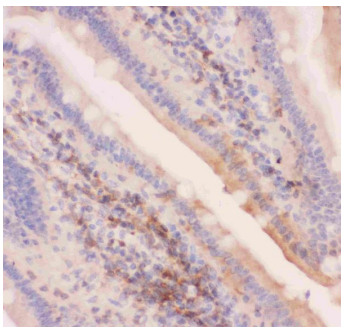
Western blot analysis of MRP4 using anti-MRP4 antibody (PB9144). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human MRP4 protein 0.5 ng. After electrophoresis, proteins were transferred to a nitrocellulose membrane 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-MRP4 antigen affinity purified polyclonal antibody (Catalog # PB9144) 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 MRP4 at approximately 47 kDa. The expected band size for MRP4 is at 47 kDa.



IHC analysis of MRP4 using anti-MRP4 antibody (PB9144). MRP4 was detected in a paraffin-embedded section of rat intestine 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 1 ug/ml rabbit anti-MRP4 Antibody (PB9144) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of MRP4 using anti-MRP4 antibody (PB9144). MRP4 was detected in a paraffin-embedded section of human intestinal 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 1 ug/ml rabbit anti-MRP4 Antibody (PB9144) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of MRP4 using anti-MRP4 antibody (PB9144). MRP4 was detected in a paraffin-embedded section of mouse intestine 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 1 ug/ml rabbit anti-MRP4 Antibody (PB9144) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex

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(SABC) (Catalog # SA1022) with DAB as the chromogen.

3 Publications Citing This Product

1. PubMed ID: 10.1155/2021/5566078, The Herbal Constituents in An-Gong-Niu-Huang Wan (AGNH) Protect against Cinnabar- and Realgar-Induced Hepatorenal Toxicity and Accumulations of Mercury and Arsenic in Mice

2. PubMed ID: 30105488, Chen L,Liao L,Zhai T,Huang X,Chen Y.Influence of Orally Administered Borneol on the Expression of Hepatic Transporters in Rats.Eur J Drug Metab Pharmacokinet.2019 Feb;44(1):103-109.doi:10.1007/s13318-018-0499-1.PMID:30105488.

3. PubMed ID: -, Songsong Wang,Xiao Xiao,Ao Li,Peng Li,"The Herbal Constituents in An-Gong-Niu-Huang Wan (AGNH) Protect against Cinnabar- and Realgar-Induced Hepatorenal Toxicity and Accumulations of Mercury and Arsenic in Mice",Evidence-Based Complementary and Alternative Medicine,vol.2021,Article ID 5566078,9 pages,2021.https://doi.org/10.1155/2021/5566078

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