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Anti-MRP4 Picoband Antibody
Catalog # ABO11843

Specification

Anti-MRP4 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O15439
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Multidrug resistance-associated protein 4(ABCC4) 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-MRP4 Picoband Antibody - Additional Information

Gene ID 10257

Other Names
Multidrug resistance-associated protein 4, ATP-binding cassette sub-family C member 4, MRP/cMOAT-related ABC transporter, Multi-specific organic anion transporter B, MOAT-B, ABCC4, MRP4

Calculated MW
149527 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Membrane; Multi-pass membrane protein.

Tissue Specificity
Widely expressed, with particularly high levels in prostate, but is barely detectable in liver.

Protein Name
Multidrug resistance-associated protein 4

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

Immunogen
E.coli-derived human MRP4 recombinant protein (Position: M1-P370).

Purification
Immunogen affinity purified.

Cross Reactivity
No 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. ABCC family. Conjugate transporter (TC 3.A.1.208) subfamily.

Anti-MRP4 Picoband Antibody - Protein Information

Name ABCC4

Synonyms MOATB, MRP4

Function
ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes physiological compounds and xenobiotics from cells. Transports a range of endogenous molecules that have a key role in cellular communication and signaling, including cyclic nucleotides such as cyclic AMP (cAMP) and cyclic GMP (cGMP), bile acids, steroid conjugates, urate, and prostaglandins (PubMed:11856762, PubMed:12523936, PubMed:12835412, PubMed:12883481, PubMed:15364914, PubMed:15454390, PubMed:16282361, PubMed:17959747, PubMed:18300232, PubMed:26721430). Mediates the ATP-dependent efflux of glutathione conjugates such as leukotriene C4 (LTC4) and leukotriene B4 (LTB4) too. The presence of GSH is necessary for the ATP-dependent transport of LTB4, whereas GSH is not required for the transport of LTC4 (PubMed:17959747). Mediates the cotransport of bile acids with reduced glutathione (GSH) (PubMed:12523936, PubMed:12883481, PubMed:16282361). Transports a wide range of drugs and their metabolites, including anticancer, antiviral and antibiotics molecules (PubMed:11856762, PubMed:12105214, PubMed:15454390, PubMed:17344354, PubMed:18300232). Confers resistance to anticancer agents such as methotrexate (PubMed:11106685).

Cellular Location
Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass

membrane protein. Note=Its localization to the basolateral or apical membranes is tissue-dependent.

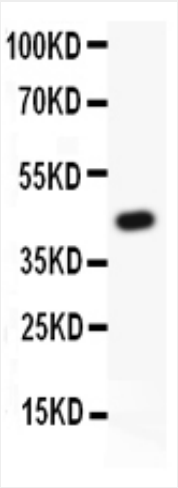
Tissue Location
Widely expressed, with particularly high levels in prostate, but is barely detectable in liver. sinusoidal membrane of hepatocytes

Anti-MRP4 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MRP4 Picoband Antibody - Images



Anti-MRP4 Picoband antibody, ABO11843-1.jpgAll lanes: Anti MRP4 (ABO11843) at 0.5ug/mlWB: Recombinant Human MRP4 Protein 0.5ngPredicted bind size: 47KDObserved bind size: 47KD

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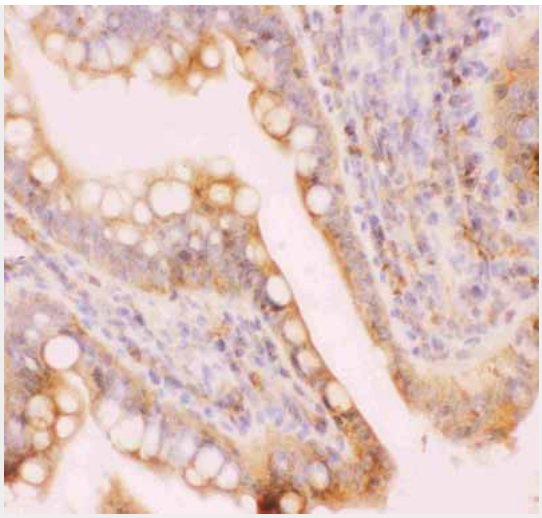
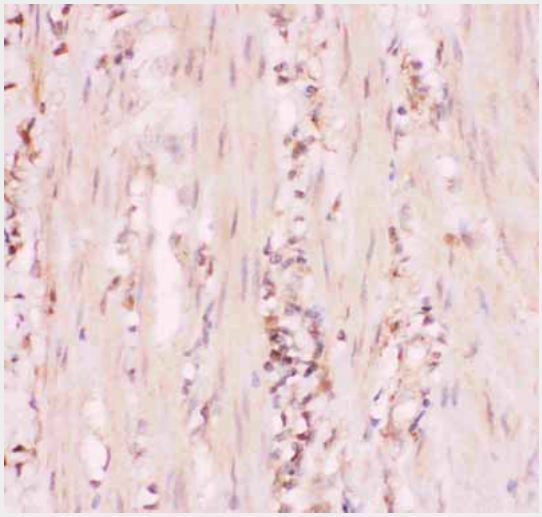
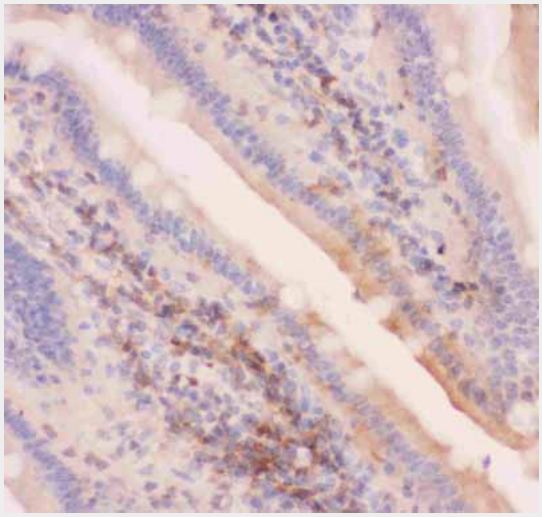


Anti-MRP4 Picoband antibody, ABO11843-2.JPGIHC(P): Rat Intestine Tissue



Anti-MRP4 Picoband antibody, ABO11843-3.JPGIHC(P): Human Intestinal Cancer Tissue



Anti-MRP4 Picoband antibody, ABO11843-4.JPGIHC(P): Mouse Intestine Tissue

Anti-MRP4 Picoband Antibody - Background

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.