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Anti-MRP4 Picoband Antibody

Catalog # ABO10198

Product Information

Application	WB
Primary Accession	O15439
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Multidrug resistance-associated protein 4(ABCC4) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Application Details	Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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-K77).
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.

Protein Information

Name	ABCC4
Synonyms	MOATB, MRP4 {ECO:0000303|PubMed:29175180
Function	ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes physiological compounds and xenobiotics from cells (PubMed:11856762, PubMed:12523936, PubMed:15364914, PubMed:38886124, PubMed:40138312). 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, PubMed:38886124, PubMed:40138312). 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). May contribute to hepatic, intestinal and renal excretion of steroid conjugates. Selectively transports steroid glucuronates and sulfates. Mediates the efflux of estrogens glucuronated at C-16 and C-17 positions, but has no transporter activity toward estrogens glucuronated at C-3. Has high affinity for dehydroepiandrosterone-3-sulfate and can also transport testosterone-17-sulfate, but has no transporter activity toward androsterone and etiocholanolone sulfate conjugates. Does not transport estrone 3-sulfate (PubMed:29175180, PubMed:39993711). Displays low affinity and high transport velocity for folates (PubMed:12036927). Transports a wide range of drugs and their metabolites. including anticancer, antiviral and antibiotic molecules (PubMed:11856762, PubMed:12105214, PubMed:15454390, PubMed:17344354, PubMed:18300232). May confer resistance to anticancer agents. Can mediate the efflux of methotrexate but is inactive toward polyglutaminated methotrexate, which is the predominant intracellular form (PubMed:11106685, PubMed:12036927).
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

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.

Images



Western blot analysis of MRP4 expression in COLO320 whole cell lysates. MRP4 at 190KD was detected using rabbit anti- MRP4 Antigen Affinity purified polyclonal antibody (Catalog # ABO10198) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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