10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MRP4/ABCC4 Rabbit pAb

Catalog # AP99960

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O15439
Other Accession	O15439
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	149527
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MRP4
Epitope Specificity	751-880/1325
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ABC transporter superfamily. ABCC family. Conjugate transporter (TC 3.A.1.208) subfamily. Contains 2 ABC transmembrane type-1 domains. Contains 2 ABC transporter domains.
SUBUNIT	Membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 protein is a member of the MRP subfamily which is involved in multi-drug resistance. The specific function of this protein has not yet been determined; however, this protein may play a role in cellular detoxification as a pump for its substrate, organic anions. Alternative splicing results in multiple splice variants encoding different isoforms. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	10257
Other Names	MOAT-B; MOATB; MRP4; ABCC4-N1; D630049P08Rik; MRP4_HUMAN; ABCC4; MRP/cMOAT-related ABC transporter; Multi-specific organic anion transporter B (MOAT-B); Multidrug resistance-associated protein 4; 7.6.2.-; 7.6.2.2; 7.6.2.3; ATP binding cassette subfamily C member 4 (PEL blood group); ATP-binding cassette, sub-family C (CFTR/MRP), member 4; ATP binding cassette subfamily C member 4; canalicular multispecific organic anion transporter (ABC superfamily); bA464I2.1 (ATP-binding cassette, sub-family C (CFTR/MRP), member 4); multispecific organic anion transporter B

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.