

MRP5 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55547

Specification

MRP5 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW
Physical State

O15440
Rat
Rabbit
Polyclonal
160 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human MRP5

Epitope Specificity 61-180/1436

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Membrane; Multi-pass membrane protein.

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.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

MRP5 (190-200 kDa) is closely related to MRP4, both lacking the first five membrane spanning regions. MRP5 is a GS-X multi specific organic anion pump (nucleotide analogs). MRP5 may transport DNP-GS and may be inhibited by certain inhibitors of organic anion transport (sulfinpyrazone). MRP5 may also transport organic anions with the anionic moiety of phosphate/phosphonate group, a function which provides the ability to resist against anti cancer drugs 6-MP and thioguanine as well as the anti-HIV drug PMEA.

MRP5 Polyclonal Antibody - Additional Information

Gene ID 10057

Other Names

Multidrug resistance-associated protein 5, ATP-binding cassette sub-family C member 5, Multi-specific organic anion transporter C, MOAT-C, SMRP, pABC11, ABCC5, MRP5

Target/Specificity



All isoforms are equally expressed in retina.

Dilution

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<span class ="dilution_WB">WB~~1:1000</span><br \> <span class
="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class ="dilution_E">E~~N/A</span>
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Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ 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 $^{\circ}$ C.

MRP5 Polyclonal Antibody - Protein Information

Name ABCC5

Synonyms MRP5

Function

ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes physiological compounds, and xenobiotics from cells. Mediates ATP-dependent transport of endogenous metabolites such as cAMP and cGMP, folic acid and N-lactoyl-amino acids (in vitro) (PubMed:10893247, PubMed: 12637526, PubMed:12695538, PubMed: 15899835, PubMed: 17229149, PubMed: 25964343). Also acts as a general glutamate conjugate and analog transporter that can limit the brain levels of endogenous metabolites, drugs, and toxins (PubMed:26515061). Confers resistance to the antiviral agent PMEA (PubMed:12695538). Able to transport several anticancer drugs including methotrexate, and nucleotide analogs in vitro, however it does with low affinity, thus the exact role of ABCC5 in mediating resistance still needs to be elucidated (PubMed: 10840050, PubMed:12435799, PubMed:12695538, PubMed:15899835). Acts as a heme transporter required for the translocation of cytosolic heme to the secretory pathway (PubMed:24836561). May play a role in energy metabolism by regulating the glucagon-like peptide 1 (GLP-1) secretion from enteroendocrine cells (By similarity).

Cellular Location

Basolateral cell membrane; Multi-pass membrane protein. Golgi apparatus lumen Endosome membrane. Cytoplasmic granule {ECO:0000250|UniProtKB:Q9R1X5}. Apical cell membrane; Multi-pass membrane protein. Note=In most cells, routes to the basolateral plasma membrane, but in the brain capillary endothelial cells that form the blood-brain barrier, resides in the apical membrane



Tissue Location

[Isoform 3]: Predominant isoform in retinal pigment epithelium, bladder, and stomach.

MRP5 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

MRP5 Polyclonal Antibody - Images