

# MRP5 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP55547

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IF, E
<b>Primary Accession</b>	<a href="#">O15440</a>
<b>Reactivity</b>	Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	160660
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human MRP5
<b>Epitope Specificity</b>	61-180/1436
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Membrane; Multi-pass membrane protein.
<b>SIMILARITY</b>	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.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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 (sulfipyrazone). 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.

## Additional Information

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<b>Gene ID</b>	10057
<b>Other Names</b>	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
<b>Target/Specificity</b>	All isoforms are equally expressed in retina.
<b>Dilution</b>	WB=1:500-2000, IHC-P=1:100-500, IHC-F=1:100-500, IF=1:100-500, ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

<b>Storage</b>	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.
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## Protein Information

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<b>Name</b>	ABCC5
<b>Synonyms</b>	MRP5
<b>Function</b>	<p>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:<a href="#">10893247</a>, PubMed:<a href="#">12637526</a>, PubMed:<a href="#">12695538</a>, PubMed:<a href="#">15899835</a>, PubMed:<a href="#">17229149</a>, PubMed:<a href="#">25964343</a>). Also acts as a general glutamate conjugate and analog transporter that can limit the brain levels of endogenous metabolites, drugs, and toxins (PubMed:<a href="#">26515061</a>). Confers resistance to the antiviral agent PMEA (PubMed:<a href="#">12695538</a>). 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:<a href="#">10840050</a>, PubMed:<a href="#">12435799</a>, PubMed:<a href="#">12695538</a>, PubMed:<a href="#">15899835</a>). Acts as a heme transporter required for the translocation of cytosolic heme to the secretory pathway (PubMed:<a href="#">24836561</a>). May play a role in energy metabolism by regulating the glucagon-like peptide 1 (GLP-1) secretion from enteroendocrine cells (By similarity).</p>
<b>Cellular Location</b>	<p>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</p>
<b>Tissue Location</b>	[Isoform 3]: Predominant isoform in retinal pigment epithelium, bladder, and stomach.

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