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MRP5 Rabbit pAb

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Catalog # AP55547

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O15440
Reactivity	Rat
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	160660
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MRP5
Epitope Specificity	61-180/1436
Isotype	IgG
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.

Additional Information

Gene ID	10057
Other Names	ATP-binding cassette sub-family C member 5, 7.6.2.-, 7.6.2.2, Multi-specific organic anion transporter C, MOAT-C, Multidrug resistance-associated protein 5, SMRP, pABC11, ABCC5, MRP5
Target/Specificity	All isoforms are equally expressed in retina.
Dilution	WB=1:500-2000,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	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.

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