

# Anti-MRP1 / ABCC1 Antibody

Mouse Monoclonal Antibody

Catalog # AH13401

## Product Information

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<b>Application</b>	WB, IHC-P, IF, FC
<b>Primary Accession</b>	<a href="#">P33527</a>
<b>Other Accession</b>	<a href="#">391464</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG1
<b>Clone Names</b>	MRP1/1343
<b>Calculated MW</b>	171591

## Additional Information

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<b>Gene ID</b>	4363
<b>Other Names</b>	ABC29; ABCC1; ATP binding cassette sub family C (CFTR/MRP) member 1; ATP-binding cassette sub-family C member 1; GSX; Leukotriene C(4) transporter; LTC4 transporter; Multidrug resistance-associated protein 1 (MRP1)
<b>Application Note</b>	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); ,Western Blotting (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0 for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
<b>Format</b>	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage</b>	Store at 2 to 8°C.Antibody is stable for 24 months.
<b>Precautions</b>	Anti-MRP1 / ABCC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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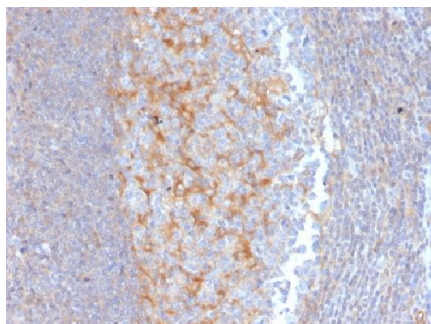
<b>Name</b>	ABCC1 ( <a href="#">HGNC:51</a> )
<b>Synonyms</b>	MRP, MRP1

<b>Function</b>	<p>Mediates export of organic anions and drugs from the cytoplasm (PubMed:<a href="#">10064732</a>, PubMed:<a href="#">11114332</a>, PubMed:<a href="#">16230346</a>, PubMed:<a href="#">7961706</a>, PubMed:<a href="#">9281595</a>). Mediates ATP-dependent transport of glutathione and glutathione conjugates, leukotriene C4, estradiol-17-beta-o-glucuronide, methotrexate, antiviral drugs and other xenobiotics (PubMed:<a href="#">10064732</a>, PubMed:<a href="#">11114332</a>, PubMed:<a href="#">16230346</a>, PubMed:<a href="#">7961706</a>, PubMed:<a href="#">9281595</a>). Confers resistance to anticancer drugs by decreasing accumulation of drug in cells, and by mediating ATP- and GSH-dependent drug export (PubMed:<a href="#">9281595</a>). Hydrolyzes ATP with low efficiency (PubMed:<a href="#">16230346</a>). Catalyzes the export of sphingosine 1-phosphate from mast cells independently of their degranulation (PubMed:<a href="#">17050692</a>). Participates in inflammatory response by allowing export of leukotriene C4 from leukotriene C4-synthesizing cells (By similarity). Mediates ATP-dependent, GSH-independent cyclic GMP-AMP (cGAMP) export (PubMed:<a href="#">36070769</a>). Thus, by limiting intracellular cGAMP concentrations negatively regulates the cGAS-STING pathway (PubMed:<a href="#">36070769</a>). Exports S-geranylgeranyl-glutathione (GGG) in lymphoid cells and stromal compartments of lymphoid organs. ABCC1 (via extracellular transport) with GGT5 (via GGG catabolism) establish GGG gradients within lymphoid tissues to position P2RY8-positive lymphocytes at germinal centers in lymphoid follicles and restrict their chemotactic transmigration from blood vessels to the bone marrow parenchyma (By similarity). Mediates basolateral export of GSH-conjugated R- and S-prostaglandin A2 diastereomers in polarized epithelial cells (PubMed:<a href="#">9426231</a>).</p>
<b>Cellular Location</b>	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein
<b>Tissue Location</b>	Lung, testis and peripheral blood mononuclear cells

## Background

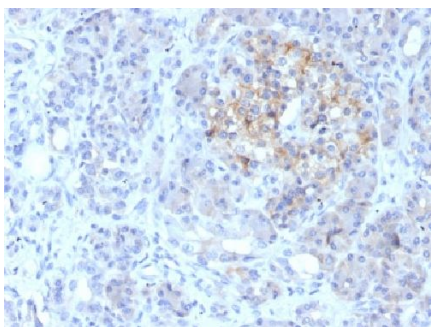
The two members of the large family of ABC transporters known to confer multidrug resistance in human cancer cells are the MDR1 P-glycoprotein and the multidrug-resistance protein MRP1. MRP1 is an integral membrane protein that contains an MDR-like core, an N-terminal membrane-bound region and a cytoplasmic linker, and it is expressed in various cerebral cells, as well as in lung, testis and peripheral blood.

## Images

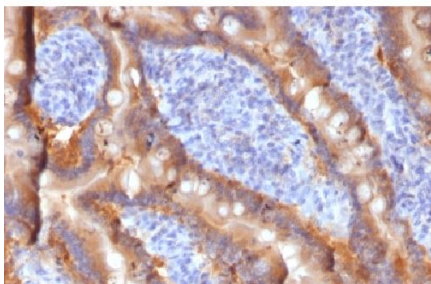


Formalin-fixed, paraffin-embedded Human Tonsil stained with MRP1/ABCC1 Monoclonal Antibody (MRP1/1343).

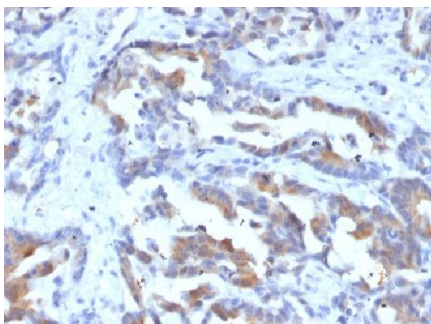
Formalin-fixed, paraffin-embedded Human Pancreas stained with MRP1/ABCC1 Monoclonal Antibody (MRP1/1343).



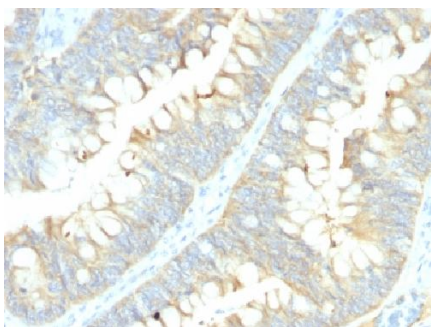
Formalin-fixed, paraffin-embedded Human Duodenum stained with MRP1/ABCC1 Monoclonal Antibody (MRP1/1343).



Formalin-fixed, paraffin-embedded Human Rectal Carcinoma stained with MRP1/ABCC1 Monoclonal Antibody (MRP1/1343).



Formalin-fixed, paraffin-embedded Human Colon Carcinoma stained with MRP1/ABCC1 Monoclonal Antibody (MRP1/1343).



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