

# Anti-MRP1 / ABCC1 Antibody

Mouse Monoclonal Antibody Catalog # AH13403

## **Specification**

# Anti-MRP1 / ABCC1 Antibody - Product Information

**Application** WB, IF, FC Primary Accession P33527 Other Accession 391464 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype Mouse / IgG2a Calculated MW 171591

## Anti-MRP1 / ABCC1 Antibody - Additional Information

## **Gene ID 4363**

#### **Other Names**

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)

### **Application Note**

### **Format**

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.

#### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

Anti-MRP1 / ABCC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Anti-MRP1 / ABCC1 Antibody - Protein Information

# Name ABCC1 (HGNC:51)

Synonyms MRP, MRP1

#### **Function**

Mediates export of organic anions and drugs from the cytoplasm (PubMed:<a href="http://www.uniprot.org/citations/10064732" target="\_blank">10064732</a>, PubMed:<a



href="http://www.uniprot.org/citations/11114332" target=" blank">11114332</a>, PubMed:<a href="http://www.uniprot.org/citations/16230346" target="blank">16230346</a>, PubMed:<a href="http://www.uniprot.org/citations/7961706" target="\_blank">7961706</a>, PubMed:<a href="http://www.uniprot.org/citations/9281595" target="\_blank">9281595</a>). Mediates ATP-dependent transport of glutathione and glutathione conjugates, leukotriene C4, estradiol-17beta-o-glucuronide, methotrexate, antiviral drugs and other xenobiotics (PubMed: <a href="http://www.uniprot.org/citations/10064732" target=" blank">10064732</a>, PubMed:<a href="http://www.uniprot.org/citations/11114332" target="blank">11114332</a>, PubMed:<a href="http://www.uniprot.org/citations/16230346" target="\_blank">16230346</a>, PubMed:<a href="http://www.uniprot.org/citations/7961706" target="\_blank">7961706</a>, PubMed:<a href="http://www.uniprot.org/citations/9281595" target="\_blank">9281595</a>). Confers resistance to anticancer drugs by decreasing accumulation of drug in cells, and by mediating ATPand GSH-dependent drug export (PubMed:<a href="http://www.uniprot.org/citations/9281595" target=" blank">9281595</a>). Hydrolyzes ATP with low efficiency (PubMed:<a href="http://www.uniprot.org/citations/16230346" target=" blank">16230346</a>). Catalyzes the export of sphingosine 1-phosphate from mast cells independently of their degranulation (PubMed:<a href="http://www.uniprot.org/citations/17050692" target=" blank">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="http://www.uniprot.org/citations/36070769" target=" blank">36070769</a>). Thus, by limiting intracellular cGAMP concentrations negatively regulates the cGAS-STING pathway (PubMed: <a href="http://www.uniprot.org/citations/36070769" target=" blank">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="http://www.uniprot.org/citations/9426231" target=" blank">9426231</a>).

# **Cellular Location**

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein

### **Tissue Location**

Lung, testis and peripheral blood mononuclear cells

## Anti-MRP1 / ABCC1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-MRP1 / ABCC1 Antibody - Images

# Anti-MRP1 / ABCC1 Antibody - 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.