

## ABCC1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6596b

### Specification

# ABCC1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, FC,E <u>P33527</u> <u>O35379</u>, <u>O864R9</u>, <u>O8HXO5</u> Human Bovine, Monkey, Mouse Rabbit Polyclonal Rabbit IgG 171591 1247-1275

## ABCC1 Antibody (C-term) - Additional Information

Gene ID 4363

**Other Names** Multidrug resistance-associated protein 1, ATP-binding cassette sub-family C member 1, Leukotriene C(4) transporter, LTC4 transporter, ABCC1, MRP, MRP1

#### Target/Specificity

This ABCC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1247-1275 amino acids from the C-terminal region of human ABCC1.

**Dilution** WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ABCC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# ABCC1 Antibody (C-term) - Protein Information



## Name ABCC1 (HGNC:51)

## Synonyms MRP, MRP1

Function Mediates export of organic anions and drugs from the cytoplasm (PubMed: 10064732, PubMed:11114332, PubMed:16230346, PubMed:7961706, PubMed:9281595). Mediates ATP-dependent transport of glutathione and glutathione conjugates, leukotriene C4, estradiol-17beta-o-glucuronide, methotrexate, antiviral drugs and other xenobiotics (PubMed: 10064732, PubMed:11114332, PubMed:16230346, PubMed:7961706, PubMed:9281595). Confers resistance to anticancer drugs by decreasing accumulation of drug in cells, and by mediating ATP- and GSH-dependent drug export (PubMed:<u>9281595</u>). Hydrolyzes ATP with low efficiency (PubMed: 16230346). Catalyzes the export of sphingosine 1-phosphate from mast cells independently of their degranulation (PubMed: <u>17050692</u>). 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: 36070769). Thus, by limiting intracellular cGAMP concentrations negatively regulates the cGAS-STING pathway (PubMed:<u>36070769</u>). 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:<u>9426231</u>).

### **Cellular Location**

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

**Tissue Location** Lung, testis and peripheral blood mononuclear cells

# ABCC1 Antibody (C-term) - Protocols

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

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

### ABCC1 Antibody (C-term) - Images





Western blot analysis of ABCC1 antibody (C-term) (Cat. #AP6596b) in Ramos cell line lysates (35ug/lane). ABCC1 (arrow) was detected using the purified Pab.



Flow cytometric analysis of NCI-H292 cells using ABCC1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# ABCC1 Antibody (C-term) - Background

ABCC1 is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra-and intra-cellular membranes. ABC gene are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This full transporter is a member of the MRP subfamily which is involved in multi-drug resistance. This protein functions as a multispecific organic anion transporter, with oxidized glutatione, cysteinyl leukotrienes, and activated aflatoxin B1 as substrates. This protein also transports glucuronides and sulfate conjugates of steroid hormones and bile salts.

# ABCC1 Antibody (C-term) - References

Siedlinski, M., Pharmacogenet. Genomics 19 (9), 675-684 (2009)