

ABCC1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6596b

Specification

ABCC1 Antibody (C-term) - Product Information

Application WB, FC,E
Primary Accession P33527

Other Accession <u>O35379</u>, <u>Q864R9</u>, <u>Q8HXQ5</u>

Reactivity Human

Predicted Bovine, Monkey, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 171591
Antigen Region 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

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: 9281595). Hydrolyzes ATP with low efficiency (PubMed: 16230346). Catalyzes the export of sphingosine 1-phosphate from mast cells independently of their degranulation (PubMed: 17050692). 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:36070769). 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: 9426231).

Cellular Location

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

Tissue Location

Lung, testis and peripheral blood mononuclear cells

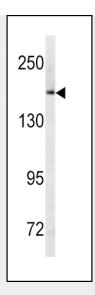
ABCC1 Antibody (C-term) - Protocols

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

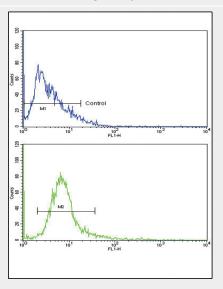
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

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)