

**Goat Anti-ABCC1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1009a****Specification**

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**Goat Anti-ABCC1 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P33527</a>
Other Accession	<a href="#">NP_063955</a> , <a href="#">4363</a> , <a href="#">17250 (mouse)</a> , <a href="#">24565 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	171591

**Goat Anti-ABCC1 Antibody - 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

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

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

**Goat Anti-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-17-beta-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 ATP- and 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

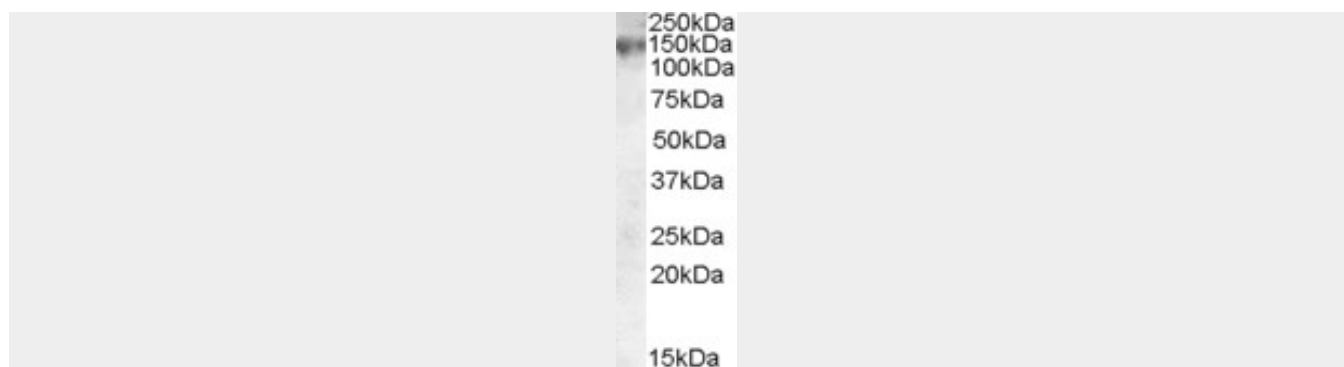
Lung, testis and peripheral blood mononuclear cells

## Goat Anti-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 Cytometry](#)
- [Cell Culture](#)

## Goat Anti-ABCC1 Antibody - Images



AF1009a (0.05 µg/ml) staining of A549 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-ABCC1 Antibody - Background**

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra-and intra-cellular membranes. ABC genes 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 glutathione, cysteinyl leukotrienes, and activated aflatoxin B1 as substrates. This protein also transports glucuronides and sulfate conjugates of steroid hormones and bile salts. Alternative splicing by exon deletion results in several splice variants but maintains the original open reading frame in all forms.

### **Goat Anti-ABCC1 Antibody - References**

Genetic variation and antioxidant response gene expression in the bronchial airway epithelium of smokers at risk for lung cancer. Wang X, et al. PLoS One, 2010 Aug 3. PMID 20689807.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Polymorphisms in the multiple drug resistance protein 1 and in P-glycoprotein 1 are associated with time to event outcomes in patients with advanced multiple myeloma treated with bortezomib and pegylated liposomal doxorubicin. Buda G, et al. Ann Hematol, 2010 Nov. PMID 20532504.

Pharmacogenetic predictors of adverse events and response to chemotherapy in metastatic colorectal cancer: results from North American Gastrointestinal Intergroup Trial N9741. McLeod HL, et al. J Clin Oncol, 2010 Jul 10. PMID 20530282.

MRP1 polymorphisms associated with citalopram response in patients with major depression. Lee SH, et al. J Clin Psychopharmacol, 2010 Apr. PMID 20520284.