

**Goat Anti-ABCC4 / MRP4 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1010a

**Specification**

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**Goat Anti-ABCC4 / MRP4 Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">O15439</a>
Other Accession	<a href="#">NP_005836</a> , <a href="#">10257</a> , <a href="#">170924 (rat)</a>
Reactivity	Human, Rat
Predicted	Mouse
Host	Goat
Clonality	Polyclonal
Concentration	0.5mg/ml
Isotype	IgG
Calculated MW	149527

**Goat Anti-ABCC4 / MRP4 Antibody - Additional Information**

**Gene ID** 10257

**Other Names**

Multidrug resistance-associated protein 4, ATP-binding cassette sub-family C member 4, MRP/cMOAT-related ABC transporter, Multi-specific organic anion transporter B, MOAT-B, ABCC4, MRP4

**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-ABCC4 / MRP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-ABCC4 / MRP4 Antibody - Protein Information**

**Name** ABCC4

**Synonyms** MOATB, MRP4

**Function**

ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes physiological compounds and xenobiotics from cells. Transports a range of endogenous molecules

that have a key role in cellular communication and signaling, including cyclic nucleotides such as cyclic AMP (cAMP) and cyclic GMP (cGMP), bile acids, steroid conjugates, urate, and prostaglandins (PubMed:<a href="http://www.uniprot.org/citations/11856762" target="\_blank">11856762</a>, PubMed:<a href="http://www.uniprot.org/citations/12523936" target="\_blank">12523936</a>, PubMed:<a href="http://www.uniprot.org/citations/12835412" target="\_blank">12835412</a>, PubMed:<a href="http://www.uniprot.org/citations/12883481" target="\_blank">12883481</a>, PubMed:<a href="http://www.uniprot.org/citations/15364914" target="\_blank">15364914</a>, PubMed:<a href="http://www.uniprot.org/citations/15454390" target="\_blank">15454390</a>, PubMed:<a href="http://www.uniprot.org/citations/16282361" target="\_blank">16282361</a>, PubMed:<a href="http://www.uniprot.org/citations/17959747" target="\_blank">17959747</a>, PubMed:<a href="http://www.uniprot.org/citations/18300232" target="\_blank">18300232</a>, PubMed:<a href="http://www.uniprot.org/citations/26721430" target="\_blank">26721430</a>). Mediates the ATP-dependent efflux of glutathione conjugates such as leukotriene C4 (LTC4) and leukotriene B4 (LTB4) too. The presence of GSH is necessary for the ATP-dependent transport of LTB4, whereas GSH is not required for the transport of LTC4 (PubMed:<a href="http://www.uniprot.org/citations/17959747" target="\_blank">17959747</a>). Mediates the cotransport of bile acids with reduced glutathione (GSH) (PubMed:<a href="http://www.uniprot.org/citations/12523936" target="\_blank">12523936</a>, PubMed:<a href="http://www.uniprot.org/citations/12883481" target="\_blank">12883481</a>, PubMed:<a href="http://www.uniprot.org/citations/16282361" target="\_blank">16282361</a>). Transports a wide range of drugs and their metabolites, including anticancer, antiviral and antibiotics molecules (PubMed:<a href="http://www.uniprot.org/citations/11856762" target="\_blank">11856762</a>, PubMed:<a href="http://www.uniprot.org/citations/12105214" target="\_blank">12105214</a>, PubMed:<a href="http://www.uniprot.org/citations/15454390" target="\_blank">15454390</a>, PubMed:<a href="http://www.uniprot.org/citations/17344354" target="\_blank">17344354</a>, PubMed:<a href="http://www.uniprot.org/citations/18300232" target="\_blank">18300232</a>). Confers resistance to anticancer agents such as methotrexate (PubMed:<a href="http://www.uniprot.org/citations/11106685" target="\_blank">11106685</a>).

#### Cellular Location

Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Its localization to the basolateral or apical membranes is tissue-dependent.

#### Tissue Location

Widely expressed, with particularly high levels in prostate, but is barely detectable in liver. sinusoidal membrane of hepatocytes

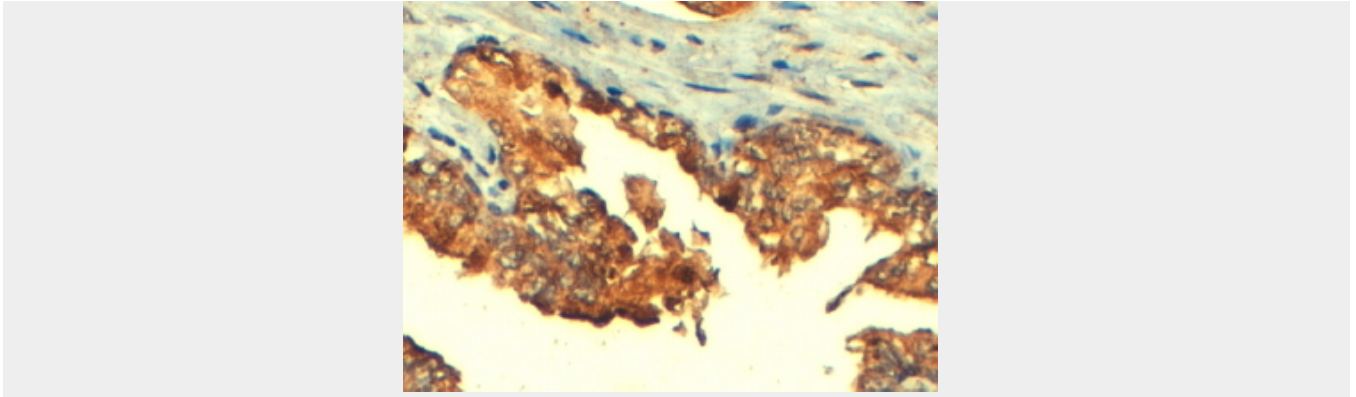
### Goat Anti-ABCC4 / MRP4 Antibody - Protocols

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-ABCC4 / MRP4 Antibody - Images





AF1010a (4 µg/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

### **Goat Anti-ABCC4 / MRP4 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 protein is a member of the MRP subfamily which is involved in multi-drug resistance. The specific function of this protein has not yet been determined; however, this protein may play a role in cellular detoxification as a pump for its substrate, organic anions. Alternative splicing results in multiple splice variants encoding different isoforms.

### **Goat Anti-ABCC4 / MRP4 Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-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. A Japanese-specific allele in the GALNT11 gene. Yuasa I, et al. *Leg Med (Tokyo)*, 2010 Jul. PMID 20547088. Aryl hydrocarbon receptor and NF-E2-related factor 2 are key regulators of human MRP4 expression. Xu S, et al. *Am J Physiol Gastrointest Liver Physiol*, 2010 Jul. PMID 20395535. The multidrug-resistance protein 4 polymorphism is a new factor accounting for thiopurine sensitivity in Japanese patients with inflammatory bowel disease. Ban H, et al. *J Gastroenterol*, 2010 Apr 15. PMID 20393862. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614.