

**ABCC4 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1824a****Specification****ABCC4 Antibody - Product Information**

Application	E, WB, FC, IHC
Primary Accession	<a href="#">O15439</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	150kDa KDa

**Description**

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.

**Immunogen**

Purified recombinant fragment of human ABCC4 (AA: 631-692) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**ABCC4 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

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**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**

ABCC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## ABCC4 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/12883481" target="\_blank">12883481</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/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/12883481" target="\_blank">12883481</a>, PubMed:<a href="http://www.uniprot.org/citations/12523936" target="\_blank">12523936</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/18300232" target="\_blank">18300232</a>, PubMed:<a href="http://www.uniprot.org/citations/17344354" target="\_blank">17344354</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

## ABCC4 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](#)

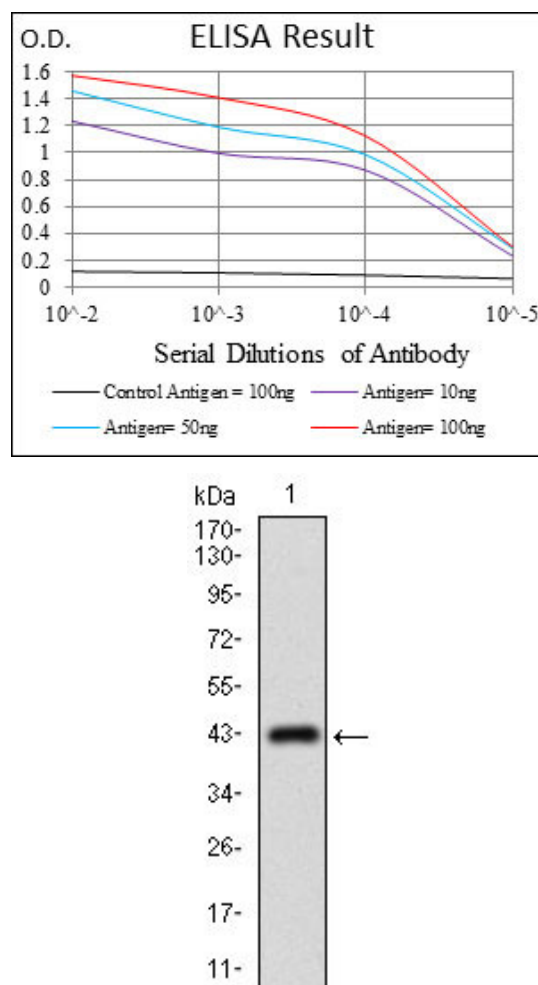


Figure 1: Western blot analysis using ABCC4 mAb against human ABCC4 recombinant protein. (Expected MW is 32.4 kDa)

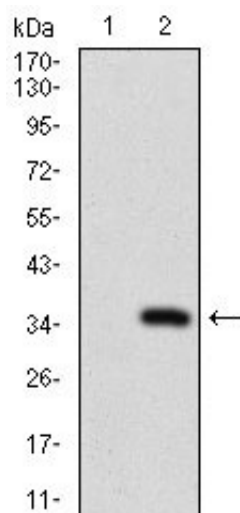


Figure 2: Western blot analysis using ABCC4 mAb against HEK293 (1) and ABCC4 (AA: 631-692)-hlgGFc transfected HEK293 (2) cell lysate.

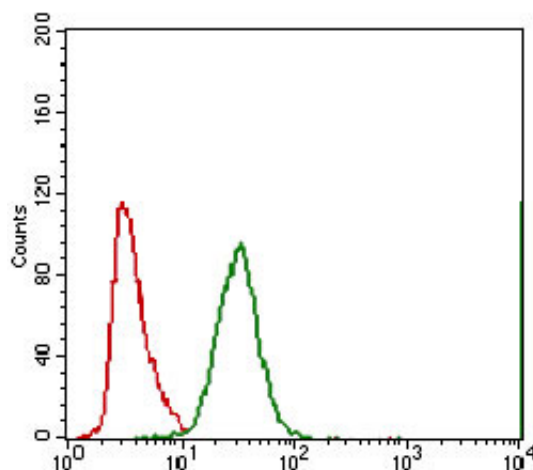


Figure 3: Flow cytometric analysis of A549 cells using ABCC4 mouse mAb (green) and negative control (red).

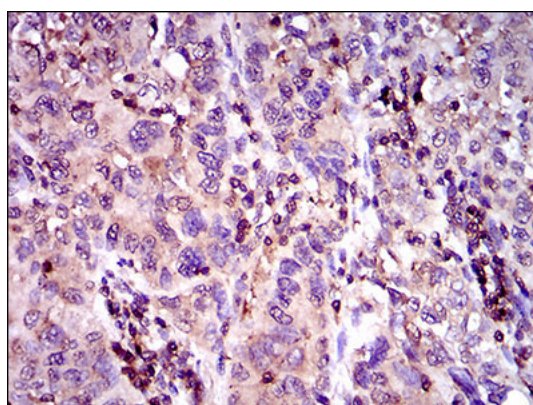


Figure 4: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using ABCC4 mouse mAb with DAB staining.

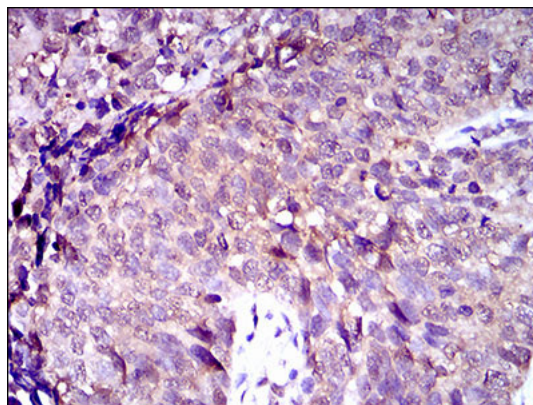


Figure 5: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using ABCC4 mouse mAb with DAB staining.

#### **ABCC4 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. ; ;

#### **ABCC4 Antibody - References**

1. Biochem Pharmacol. 2012 Aug 1;84(3):366-73.
2. Arch Dermatol Res. 2012 Jan;304(1):57-63.