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# ABCC5 Antibody (Center)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP8578c**

## Specification

### ABCC5 Antibody (Center) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P, FC,E** |
| Primary Accession | O15440 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **160660** |
| Antigen Region | **625-652** |

### ABCC5 Antibody (Center) - Additional Information

**Gene ID** 10057

**Other Names**
Multidrug resistance-associated protein 5, ATP-binding cassette sub-family C member 5, Multi-specific organic anion transporter C, MOAT-C, SMRP, pABC11, ABCC5, MRP5

**Target/Specificity**
This ABCC5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 625-652 amino acids from the Central region of human ABCC5.

**Dilution**
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**
ABCC5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### ABCC5 Antibody (Center) - Protein Information

**Name** ABCC5

**Synonyms** MRP5

**Function** ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes physiological compounds, and xenobiotics from cells. Mediates ATP-dependent transport of endogenous metabolites such as cAMP and cGMP, folic acid and N-lactoyl-amino acids (in vitro) (PubMed:10893247, PubMed:15899835, PubMed:25964343, PubMed:17229149, PubMed:12695538, PubMed:12637526). Acts also as a general glutamate conjugate and analog transporter that can limit the brain levels of endogenous metabolites, drugs, and toxins (PubMed:26515061). Confers resistance to the antiviral agent PMEA (PubMed:12695538). Able to transport several anticancer drugs including methotrexate, and nucleotide analogs in vitro, however it does with low affinity, thus the exact role of ABCC5 in mediating resistance still needs to be elucidated (PubMed:10840050, PubMed:15899835, PubMed:12435799, PubMed:12695538). Acts as a heme transporter required for the translocation of cytosolic heme to the secretory pathway (PubMed:24836561). May play a role in energy metabolism by regulating the glucagon-like peptide 1 (GLP-1) secretion from enteroendocrine cells (By similarity).

**Cellular Location**
Basolateral cell membrane; Multi-pass membrane protein. Golgi apparatus lumen Endosome membrane. Cytoplasmic granule {ECO:0000250|UniProtKB:Q9R1X5}. Apical cell membrane; Multi-pass membrane protein. Note=In most cells, routes to the basolateral plasma membrane, but in the brain capillary endothelial cells that form the blood-brain barrier, resides in the apical membrane

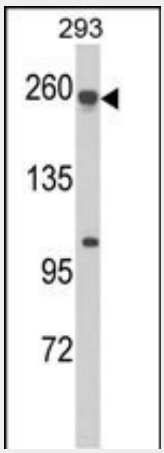
**Tissue Location**
[Isoform 3]: Predominant isoform in retinal pigment epithelium, bladder, and stomach.

## ABCC5 Antibody (Center) - Protocols

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

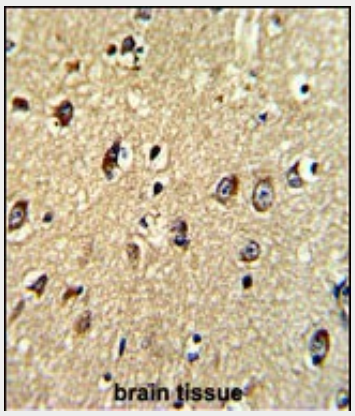
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ABCC5 Antibody (Center) - Images

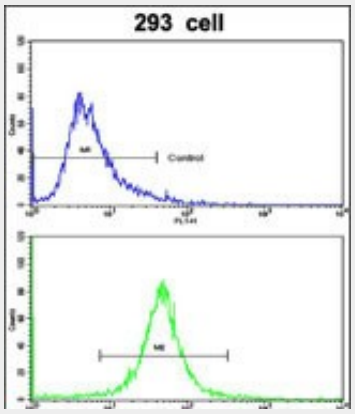


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Western blot analysis of ABCC5 Antibody (Center) (Cat. #AP8578c) in 293 cell line lysates (35ug/lane). ABCC5 (arrow) was detected using the purified Pab.(2ug/ml)




Formalin-fixed and paraffin-embedded human brain tissue with ABCC5 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.




Flow cytometric analysis of 293 cells using ABCC5 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**ABCC5 Antibody (Center) - Background**

ABCC5 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. This protein functions in the cellular export of its substrate, cyclic nucleotides. This export contributes to the degradation of phosphodiesterases and possibly an elimination pathway for cyclic nucleotides. Studies show that this protein provides resistance to thiopurine anticancer drugs,6-mercatopurine and thioguanine, and the anti-HIV drug 9-(2-phosphonylmethoxyethyl)adenine. This protein may be involved in resistance to thiopurines in acute lymphoblastic leukemia and antiretroviral nucleoside analogs in HIV-infected patients.

**ABCC5 Antibody (Center) - References**

Olsen,J.V., et.al., Cell 127 (3), 635-648 (2006)