

**Anti-ABCB1 (RABBIT) Antibody**  
**ABCB1 Antibody**  
**Catalog # ASR5376**

**Specification**

---

**Anti-ABCB1 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry, and western blot.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 255-280 of human ABCB1 protein.
Preservative	0.01% (w/v) Sodium Azide

**Anti-ABCB1 (RABBIT) Antibody - Additional Information**

**Gene ID** 5243

**Other Names**  
5243

**Purity**

This affinity-purified antibody is directed against human ABCB1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross reactivity with ABCB1 protein from human, monkey, dog, mouse, and rat based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-ABCB1 (RABBIT) Antibody - Protein Information

Name ABCB1 ([HGNC:40](#))

Synonyms MDR1, PGY1

### Function

Translocates drugs and phospholipids across the membrane (PubMed:<a href="http://www.uniprot.org/citations/2897240" target="\_blank">2897240</a>, PubMed:<a href="http://www.uniprot.org/citations/35970996" target="\_blank">35970996</a>, PubMed:<a href="http://www.uniprot.org/citations/8898203" target="\_blank">8898203</a>, PubMed:<a href="http://www.uniprot.org/citations/9038218" target="\_blank">9038218</a>, PubMed:<a href="http://www.uniprot.org/citations/35507548" target="\_blank">35507548</a>). Catalyzes the flop of phospholipids from the cytoplasmic to the exoplasmic leaflet of the apical membrane. Participates mainly to the flop of phosphatidylcholine, phosphatidylethanolamine, beta-D-glucosylceramides and sphingomyelins (PubMed:<a href="http://www.uniprot.org/citations/8898203" target="\_blank">8898203</a>). Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:<a href="http://www.uniprot.org/citations/2897240" target="\_blank">2897240</a>, PubMed:<a href="http://www.uniprot.org/citations/35970996" target="\_blank">35970996</a>, PubMed:<a href="http://www.uniprot.org/citations/9038218" target="\_blank">9038218</a>).

### Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441} Apical cell membrane. Cytoplasm Note=ABCB1 localization is influenced by C1orf115 expression levels (plasma membrane versus cytoplasm). Localized to the apical membrane of enterocytes (PubMed:28408210).

### Tissue Location

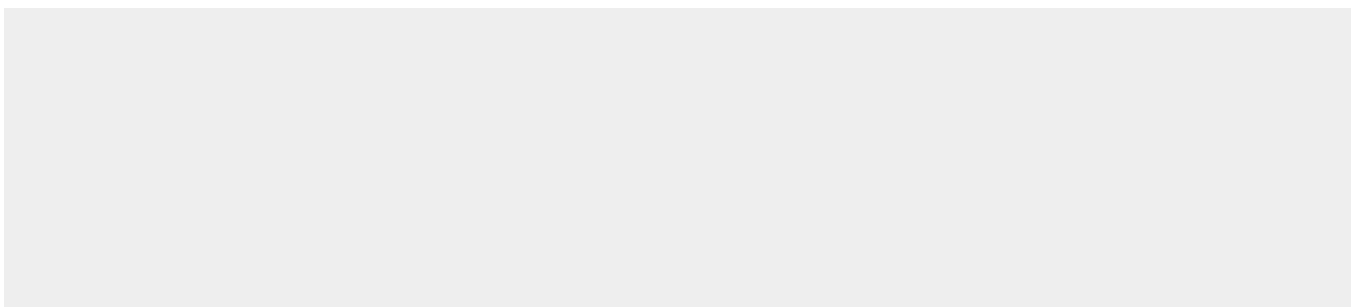
Expressed in small intestine (PubMed:28408210). Expressed in liver, kidney and brain.

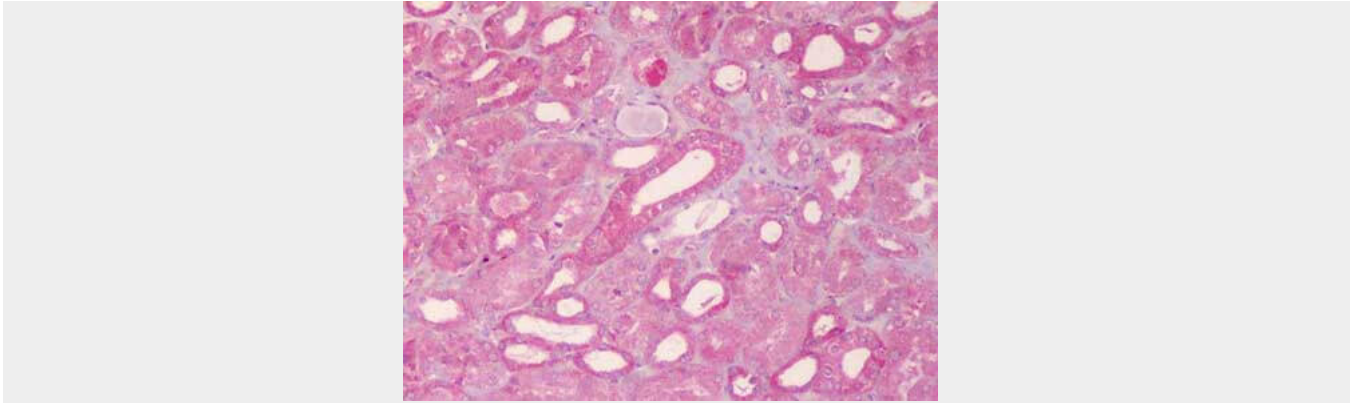
## Anti-ABCB1 (RABBIT) Antibody - Protocols

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](#)

## Anti-ABCB1 (RABBIT) Antibody - Images





IHC using Rockland ABCB1 Antibody at 20 ug/ml against FFPE human kidney. Moderate to strong cytoplasmic and membranous staining seen in this example. Similar staining also observed in other tissues including liver, kidney, and small intestine. The antibody showed minimal background staining and worked well in formalin-fixed tissues. Image provided courtesy of Lifespan Biosciences.

#### **Anti-ABCB1 (RABBIT) Antibody - Background**

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. ATP-Binding Cassette Sub-Family B Member 1 (ABCB1, also named P-glycoprotein) is a plasma membrane-associated multidrug transporter that utilizes the energy of ATP hydrolysis to pump toxic xenobiotics out of cells. Unique features of ABCB1 are its very broad substrate specificity and its basal ATPase activity in the absence of transport substrates. Human ABCB1 plays an important role in absorption, distribution, metabolism, excretion and toxicity of pharmacologically relevant drugs. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anti-cancer drugs. This protein also functions as a transporter across the blood-brain barrier.