

**Anti-P GlycoProtein Antibody**  
**Catalog # ABO12719****Specification**

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**Anti-P GlycoProtein Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P08183</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Multidrug resistance protein 1(ABCB1) detection. Tested with IHC-P, IHC-F in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-P GlycoProtein Antibody - Additional Information**

**Gene ID** 5243

**Other Names**

Multidrug resistance protein 1, 3.6.3.44, ATP-binding cassette sub-family B member 1, P-glycoprotein 1, CD243, ABCB1, MDR1, PGY1

**Calculated MW**

141479 MW KDa

**Application Details**

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Mouse, Rat,  
-<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>

**Subcellular Localization**

Cell membrane ; Multi-pass membrane protein .

**Tissue Specificity**

Expressed in liver, kidney, small intestine and brain.

**Protein Name**

Multidrug resistance protein 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human P Glycoprotein(621-650aa IYFKLVMTMQTAGNEVELENAADESKSEIDA), different from the related rat

sequence by twelve amino acids.

#### **Purification**

Immunogen affinity purified.

#### **Cross Reactivity**

No cross reactivity with other proteins

#### **Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

#### **Sequence Similarities**

Belongs to the ABC transporter superfamily. ABCB family. Multidrug resistance exporter (TC 3.A.1.201) subfamily.

### **Anti-P GlycoProtein 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/8898203" target="\_blank">8898203</a>, PubMed:<a href="http://www.uniprot.org/citations/2897240" target="\_blank">2897240</a>, PubMed:<a href="http://www.uniprot.org/citations/9038218" target="\_blank">9038218</a>, PubMed:<a href="http://www.uniprot.org/citations/35970996" target="\_blank">35970996</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/9038218" target="\_blank">9038218</a>, PubMed:<a href="http://www.uniprot.org/citations/35970996" target="\_blank">35970996</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.

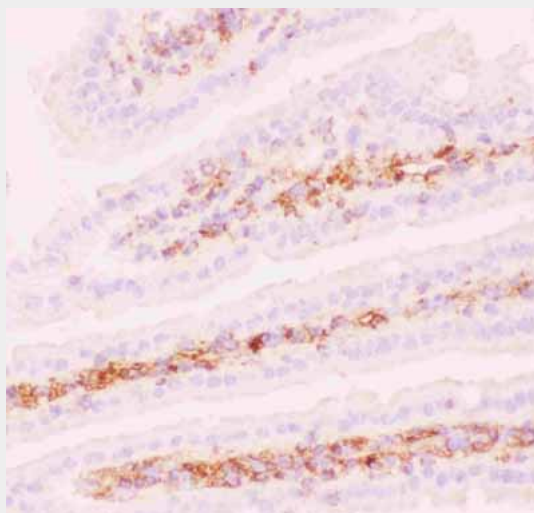
### **Anti-P GlycoProtein Antibody - Protocols**

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

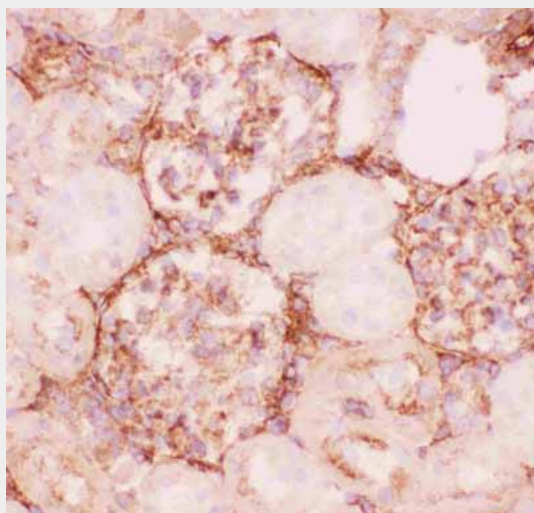
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

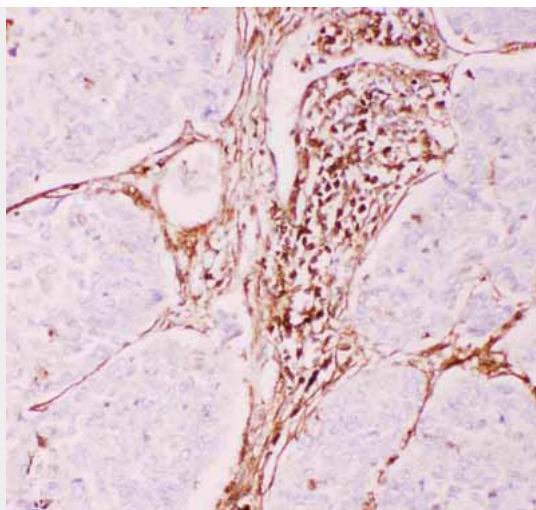
#### Anti-P Glycoprotein Antibody - Images



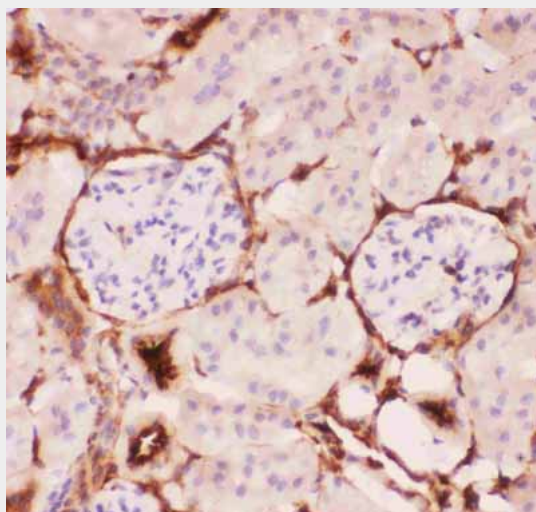
Anti-P Glycoprotein Picoband antibody, ABO12719-1.JPGIHC(F): Mouse Intestine Tissue



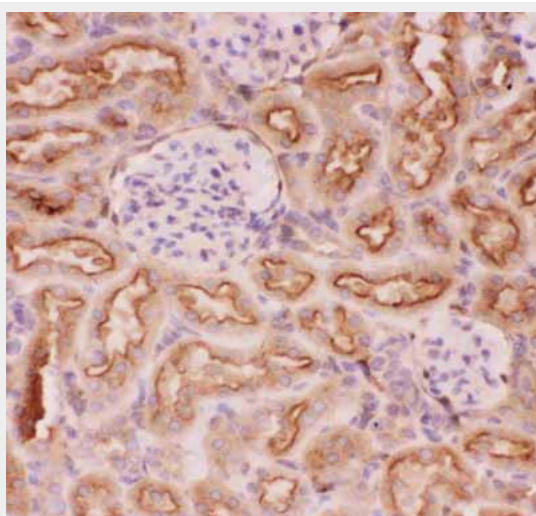
Anti-P Glycoprotein Picoband antibody, ABO12719-2.JPGIHC(F): Rat Kidney Tissue



Anti-P Glycoprotein Picoband antibody, ABO12719-3.JPGIHC(P): Human Lung Cancer Tissue



Anti-P Glycoprotein Picoband antibody, ABO12719-4.JPGIHC(P): Mouse Kidney Tissue



Anti-P Glycoprotein Picoband antibody, ABO12719-5.JPGIHC(P): Rat Kidney Tissue

#### **Anti-P GlycoProtein Antibody - Background**

P-GP, also called ABCB1 or PGY1, is a glycoprotein that in humans is encoded by the ABCB1 gene. It is mapped to 7q21.12. P-GP is a well-characterized ABC-transporter (which transports a wide variety of substrates across extra- and intracellular membranes) of the MDR/TAP subfamily. It is an important protein of the cell membrane that pumps many foreign substances out of cells. More formally, it is an ATP-dependent drug efflux pump with broad substrate specificity. P-GP is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood–brain barrier.