

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

Application	IHC
Primary Accession	P08183
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,
-
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human P Glycoprotein(621-650aa IYFKLVMTQTAGNEVELENAADESKSEIDA), 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:[2897240](http://www.uniprot.org/citations/2897240), PubMed:[35970996](http://www.uniprot.org/citations/35970996), PubMed:[8898203](http://www.uniprot.org/citations/8898203), PubMed:[9038218](http://www.uniprot.org/citations/9038218)). 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:[8898203](http://www.uniprot.org/citations/8898203)). Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:[2897240](http://www.uniprot.org/citations/2897240), PubMed:[35970996](http://www.uniprot.org/citations/35970996), PubMed:[9038218](http://www.uniprot.org/citations/9038218)).

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.

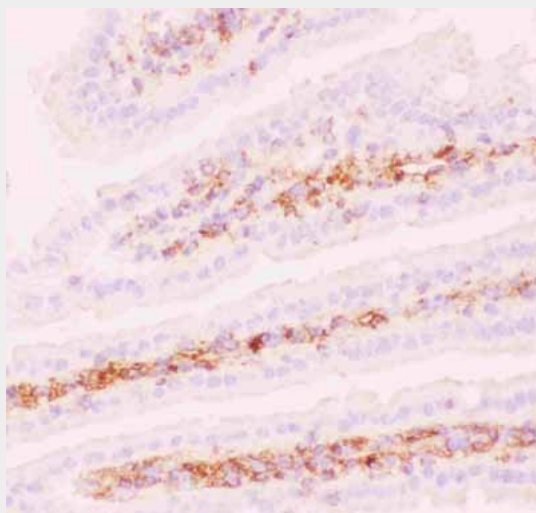
Anti-P GlycoProtein Antibody - Protocols

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

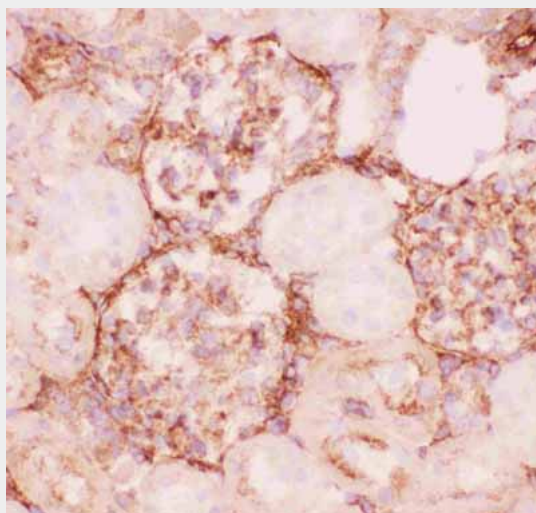
- [Western Blot](#)

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

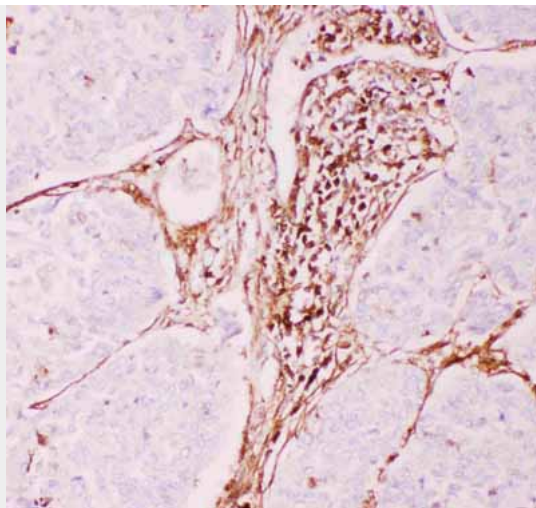
Anti-P Glycoprotein Antibody - Images



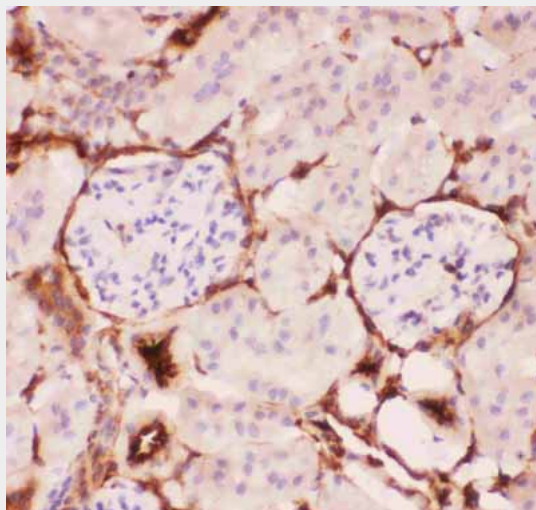
Anti-P Glycoprotein Picoband antibody, ABO12719-1.JPGIHC(F): Mouse Intestine Tissue



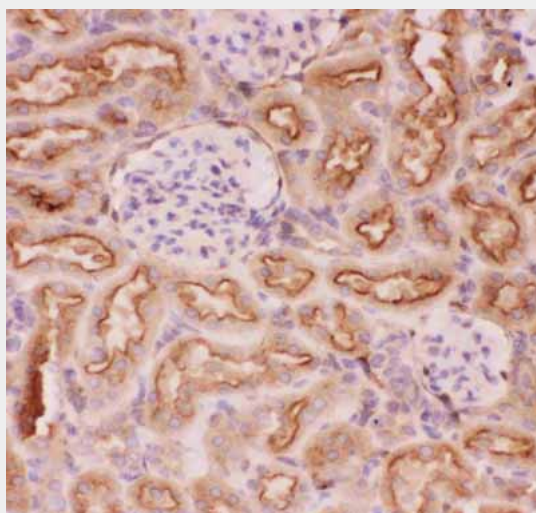
Anti-P Glycoprotein Picoband antibody, ABO12719-2.JPGIHC(F): Rat Kidney Tissue



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.