

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 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 r°Constitution, 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, PubMed:35970996, PubMed:8898203, PubMed:9038218, PubMed:35507548). 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). Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:2897240, PubMed:35970996, PubMed: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

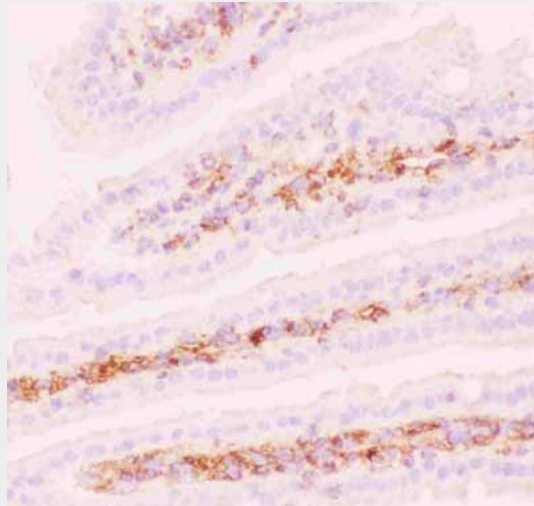
Expressed in small intestine (PubMed:28408210). Expressed in liver, kidney and brain.

Anti-P GlycoProtein Antibody - Protocols

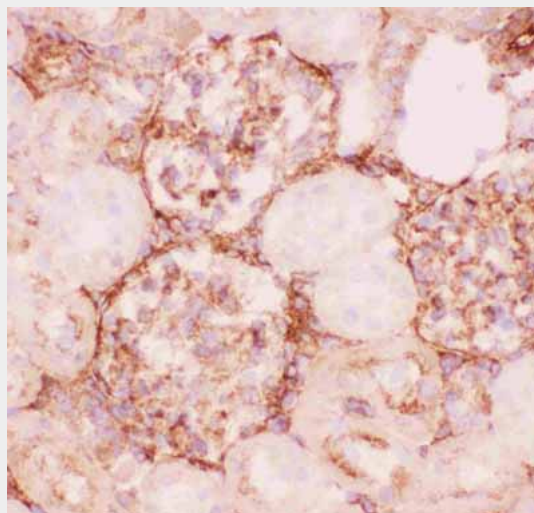
Provided below are standard protocols that you may find useful for product applications.

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

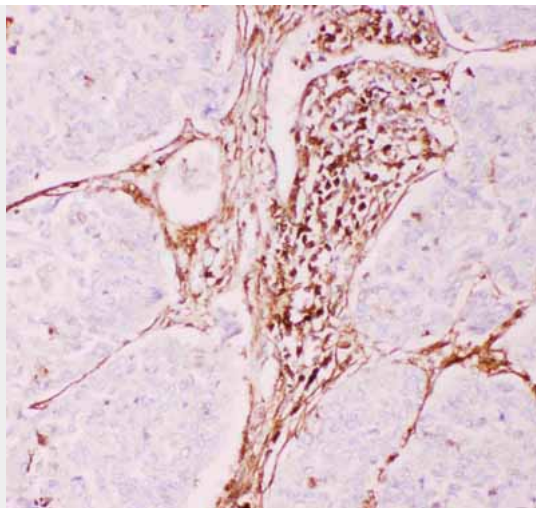
Anti-P Glycoprotein Antibody - Images



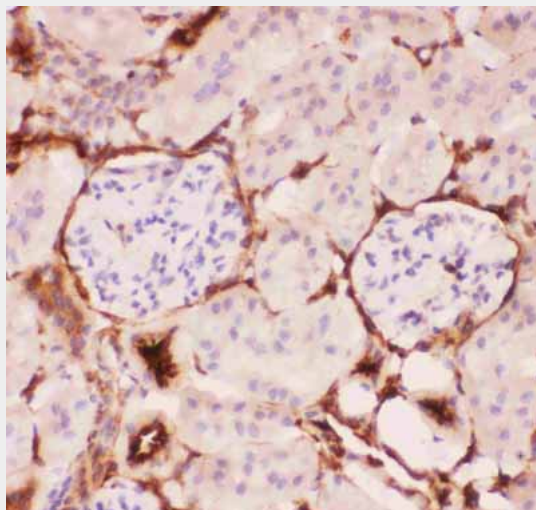
Anti-P Glycoprotein Picoband antibody, ABO12719-1.JPGIHC(F): Mouse Intestine Tissue



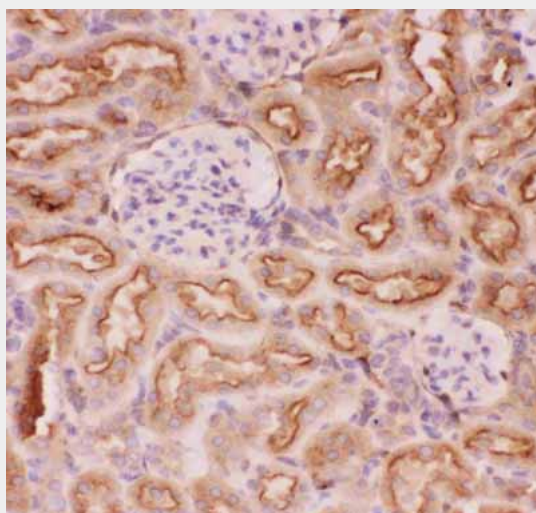
Anti-P Glycoprotein Picoband antibody, ABO12719-2.JPGIHC(F): Rat Kidney Tissue



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.