10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 IYFKLVTMQTAGNEVELENAADESKSEIDA), 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).

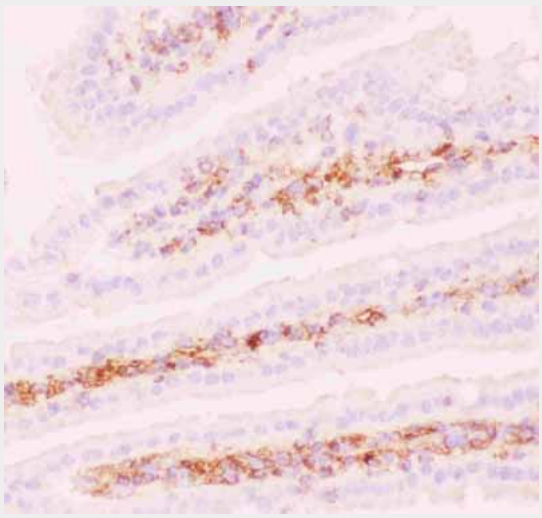
Tissue Location
Expressed in small intestine (PubMed:28408210). Expressed in liver, kidney and brain.

Anti-P GlycoProtein Antibody - Protocols

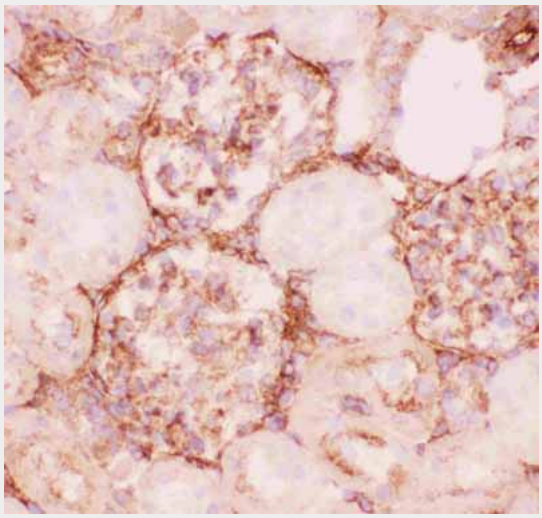
Provided below are standard protocols that you may find useful for product applications.

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

Anti-P GlycoProtein Antibody - Images

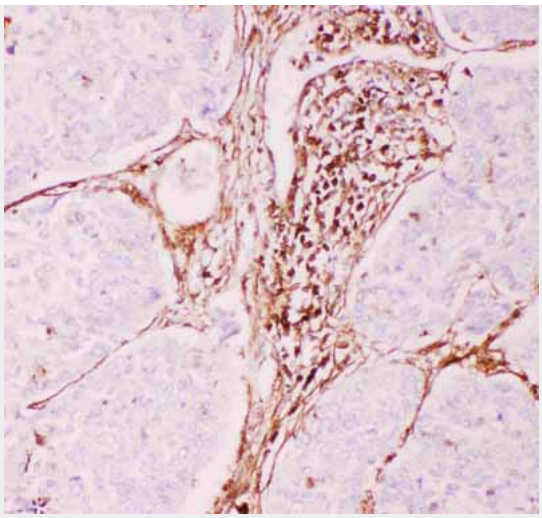


Anti-P Glycoprotein Picoband antibody, ABO12719-1.JPGIHC(F): Mouse Intestine Tissue

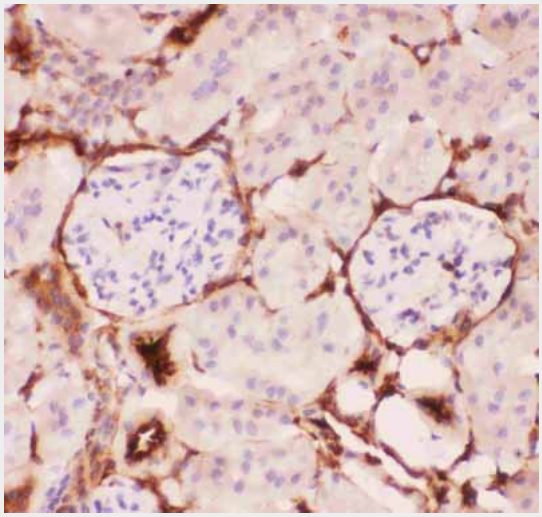


Anti-P Glycoprotein Picoband antibody, ABO12719-2.JPGIHC(F): Rat Kidney Tissue

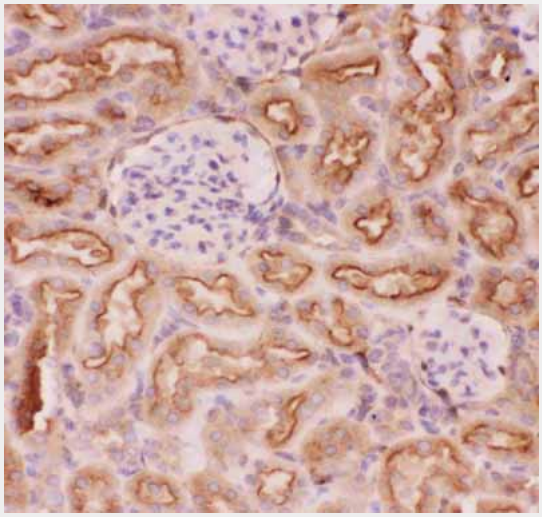
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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 forxenobiotic 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 bloodâ€“brain barrier.