

P-glycoprotein Antibody

Rabbit Polyclonal Antibody Catalog # ABV11487

Specification

P-glycoprotein Antibody - Product Information

Application IHC
Primary Accession P08183

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Calculated MW 141479

P-glycoprotein Antibody - Additional Information

Gene ID 5243

Positive Control IHC: Mouse Kidney, Mouse Intestine, Rat

Kidney, Human Lung Cancer tissue IHC: 1:500-1:1000 of 0.5 mg/ml stock

Other Names

 $\hbox{P-gp, Multidrug resistance protein 1, MDR1, ATP-binding cassette sub-family B (MDR/TAP) member} \\$

1, ABCB1

Target/Specificity

Application & Usage

P-glycoprotein

Antibody Form

Lyophilized

Appearance

Solid

Formulation

Each vial contains 5mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg NaN3

Handling

The vial should be centrifuged to collect the lyophilized solid before reconstituting

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

P-glycoprotein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



P-glycoprotein Antibody - Protein Information

Name ABCB1 (HGNC:40)

Synonyms MDR1, PGY1

Function

Translocates drugs and phospholipids across the membrane (PubMed:8898203, PubMed:2897240, PubMed:9038218, PubMed:35970996). 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:9038218, PubMed:9038218, PubMed: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.

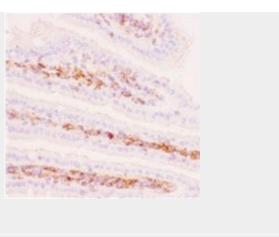
P-glycoprotein Antibody - Protocols

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

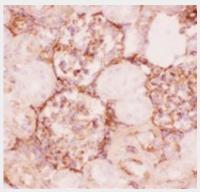
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

P-glycoprotein Antibody - Images

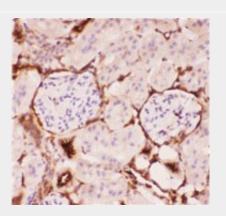




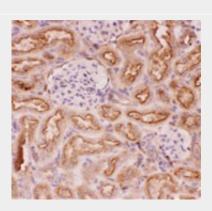
IHC(F):Mouse Intestine



IHC(F):Rat Kidney

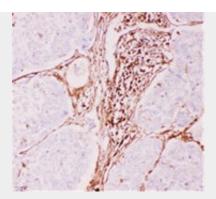


IHC(P):Mouse Kidney



IHC(P):Rat Kidney





IHC(P):Human lung cancer

P-glycoprotein Antibody - Background

P-gp, also called MDR1 or ABCB1, is a glycoprotein that in humans is encoded by the ABCB1 gene. P-gp is a well-characterized ABC-transporter (which transports a wide variety of xenobiotics across extra- and intracellular membranes). It is an ATP-dependent drug efflux pump 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 functions in the kidneys, liver, blood-brain barrier and the intestinal epithelium.