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

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**
Application & Usage	**IHC: 1:500-1:1000 of 0.5 mg/ml stock**

Other Names
P-gp, Multidrug resistance protein 1, MDR1, ATP-binding cassette sub-family B (MDR/TAP) member 1, ABCB1

Target/Specificity
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:35970996).

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
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

P-glycoprotein Antibody - Images

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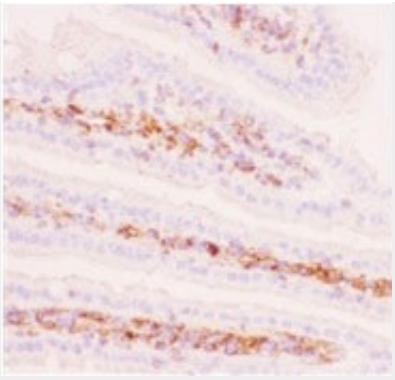
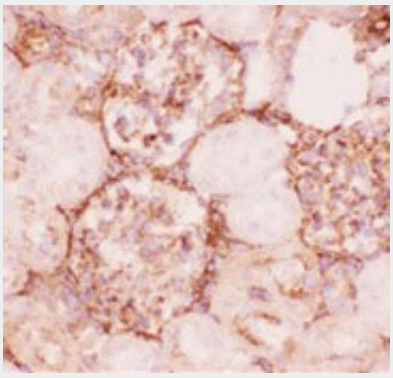
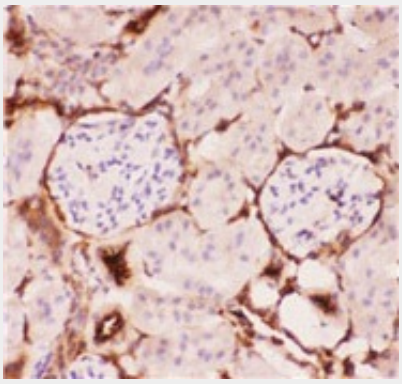


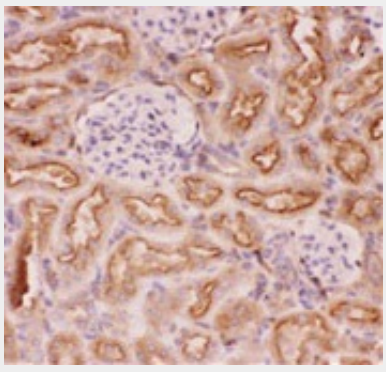
IHC(F):Mouse Intestine



IHC(F):Rat Kidney



IHC(P):Mouse Kidney



IHC(P):Rat Kidney

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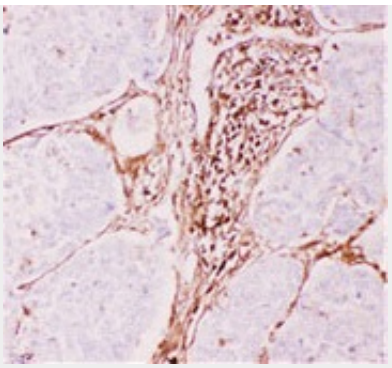

IHC(P):Human lung cancer

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.