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Anti-P GlycoProtein Antibody

Catalog # ABO12719

Product Information

Application	IHC-P, IHC-F
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.

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
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 □g/ml, Mouse, Rat, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat
Subcellular Localization	Cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Expressed in liver, kidney, small intestine and brain.
Source	Eukaryota
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.

Protein Information

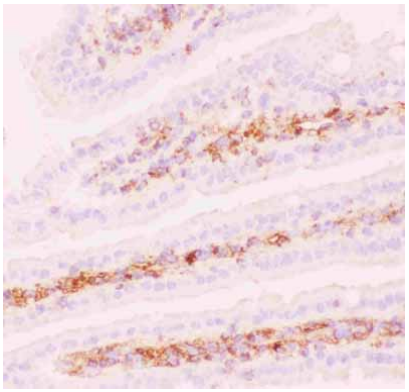
Name	ABCB1 (HGNC:40)
Synonyms	MDR1, PGY1
Function	Translocates phospholipids and drugs across the membrane (PubMed:2897240, PubMed:35970996, PubMed:8898203, PubMed:9038218, PubMed:35507548). Catalyzes the flop of phospholipids from the cytoplasmic to the exoplasmic leaflet of the apical membrane. Participates 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). May contribute to hepatobiliary and renal excretion of etiocholanolone-3-glucuronate. Appears to have very low activity toward testosterone, androsterone and dihydrotestosterone glucuronates.
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.

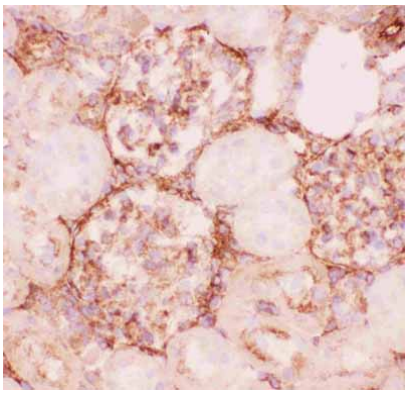
Background

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 blood â€“brain barrier.

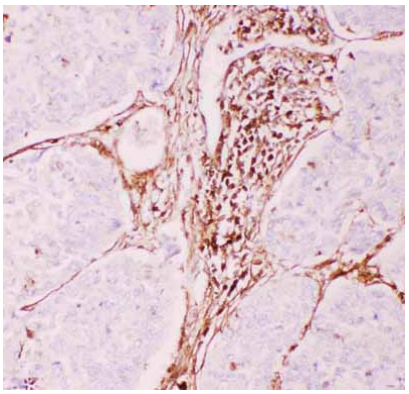
Images

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

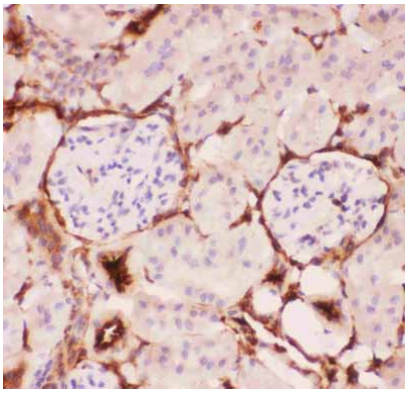




Anti-P Glycoprotein Picoband antibody, ABO12719-2.JPGIHC(F): Rat Kidney Tissue

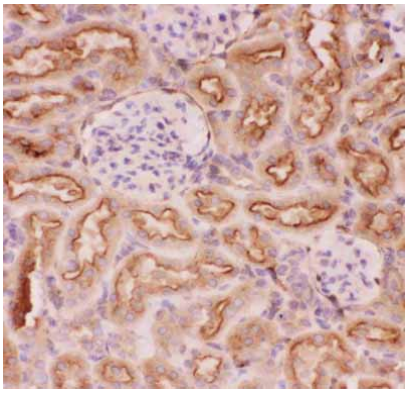


Anti-P Glycoprotein Picoband antibody, ABO12719-3.JPGIHC(P): Human Lung Cancer Tissue



Anti-P Glycoprotein Picoband antibody, ABO12719-4.JPGIHC(P): Mouse Kidney Tissue

Anti-P Glycoprotein Picoband antibody, ABO12719-5.JPGIHC(P): Rat Kidney Tissue



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