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Anti-P-GlycoProtein(MDR) Antibody (Monoclonal, F4)

Catalog # ABO10448

Product Information

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	P21447
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for P-Glycoprotein (MDR), ATP-binding cassette, sub-family B (MDR/TAP), member 1 (ABCB1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	18671
Other Names	Multidrug resistance protein 1A, 3.6.3.44, ATP-binding cassette sub-family B member 1A, MDR1A, Multidrug resistance protein 3, P-glycoprotein 3, Abcb1a, Abcb4, Mdr1a, Mdr3, Pgy-3, Pgy3
Calculated MW	140647
Application Details	Immunohistochemistry(Paraffin-embedded Section), 1-2 □g/ml, Human, By Heat Immunocytochemistry , 1 □g/ml, Human, - Immunohistochemistry(Frozen Section), 1-2 □g/ml, Human, - Western blot, 0.5-1 □g/ml, Human
Subcellular Localization	Cell membrane; Multi-pass membrane protein.
Tissue Specificity	ABCB1: Expressed in liver, kidney, small intestineand brain.
Source	Eukaryota
Protein Name	Multidrug resistance protein 1
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.
Clone Names	F4
Immunogen	Mixture of human and hamster drug-resistant whole cells and crude plasma

	membranes.
Purification	Ascites
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	Abcb1a {ECO:0000312|MGI:MGI:97570}
Function	Translocates phospholipids and drugs across the membrane. 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 (By similarity). 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 {ECO:0000250|UniProtKB:P08183}; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441} Apical cell membrane. Cytoplasm {ECO:0000250|UniProtKB:P08183}. Note=ABCB1 localization is influenced by C1orf115 expression levels (plasma membrane versus cytoplasm) {ECO:0000250|UniProtKB:P08183}

Background

P-Glycoprotein,, also known as Multidrug Resistance 1(MDR1), is one of the ATP-binding cassette transporters family. P-glycoprotein-1 is involved in the transport of 3 of these protease inhibitors in vitro. MDR1 gene is mapped to the 7q21.1 by in situ hybridization. The MDR1 gene product, P-glycoprotein, mediates the transport of the cardiac glycoside, digoxin.

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