

Mouse anti-Human ABCB4 Monoclonal Antibody | anti-ABCB4 antibody

ABCB4 Antibody

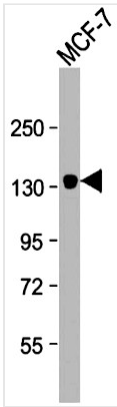
CATALOG # AAA290845	HOST Mouse	REACTIVITY Human	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

ABCB4; Monoclonal Antibody; ABCB4 Antibody; Multidrug resistance protein 3; 3.6.3.44; ATP-binding cassette sub-family B member 4; P-glycoprotein 3; MDR3; PGY3; anti-ABCB4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1,k
Specificity	This ABCB4 antibody is generated from a mouse immunized with a recombinant protein of human ABCB4.
Purity/Purification	This antibody is purified through a protein G column, followed by dialysis against PBS.
Form/Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Length	1279
Applicable Applications for anti-ABCB4 antibody	ELISA, WB (Western Blot)
Function	Energy-dependent phospholipid efflux translocator that acts as a positive regulator of biliary lipid secretion. Functions as a floppase that translocates specifically phosphatidylcholine (PC) from the inner to the outer leaflet of the canalicular membrane bilayer into the canaliculi of hepatocytes. Translocation of PC makes the biliary phospholipids available for extraction into the canaliculi lumen by bile salt mixed micelles and therefore protects the biliary tree from the detergent activity of bile salts (PubMed:7957936, PubMed:8898203, PubMed:9366571, PubMed:17523162, PubMed:23468132, PubMed:24806754, PubMed:24723470, PubMed:24594635, PubMed:21820390). Plays a role in the recruitment of phosphatidylcholine (PC), phosphatidylethanolamine (PE) and sphingomyelin (SM) molecules to nonraft membranes and to further enrichment of SM and cholesterol in raft membranes in hepatocytes (PubMed:23468132). Required for proper phospholipid bile formation (By similarity). Indirectly involved in cholesterol efflux activity from hepatocytes into the canalicular lumen in the presence of bile salts in an ATP-dependent manner (PubMed:24045840). Promotes biliary phospholipid secretion as canaliculi-containing vesicles from the canalicular plasma membrane (PubMed:9366571, PubMed:28012258). In cooperation with ATP8B1, functions to protect hepatocytes from the deleterious detergent activity of bile salts (PubMed:21820390). Does not confer multidrug resistance (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000255 PROSITE-ProRule:PRU00441}. Apical cell membrane; Multi-pass membrane protein {ECO:0000255 PROSITE-ProRule:PRU00441}. Membrane raft. Cytoplasm Cytoplasmic vesicle, clathrin-coated vesicle {ECO:0000250 UniProtKB:Q08201}. Note=Localized at the apical canalicular membrane of the epithelial cells lining the lumen of the bile canaliculi and biliary ductules (By similarity). Transported from the Golgi to the apical bile canalicular membrane in a RACK1-dependent manner (PubMed:19674157). Redistributed into pseudocanalliculi formed between cells in a bezafibrate- or PPARA-dependent manner (PubMed:15258199). Localized preferentially in lipid nonraft domains of canalicular plasma membranes (PubMed:23468132) {ECO:0000250 UniProtKB:P21440, ECO:0000269 PubMed:15258199, ECO:0000269 PubMed:19674157, ECO:0000269 PubMed:23468132}
Preparation and Storage	Maintain refrigerated at 2-8°C. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)
Anti-ABCB4 Antibody at 1:4000 dilution + MCF-7 whole cell lysateLysates/proteins at 20 ug per lane.SecondaryGoat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.Predicted band size : 142 kDaBlocking/Dilution buffer: 5% NFD/MTBST.

ADDITIONAL INFORMATION

Product Categories/Family for anti-ABCB4 antibody	Crown Antibodies; Primary Antibodies; Metabolism; Signal Transduction
References	van der Bliek A.M.,et al.Gene 71:401-411 (1988). Hillier L.W.,et al.Nature 424:157-164 (2003). Scherer S.W.,et al.Science 300:767-772 (2003). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Smit J.J.,et al.Biochim. Biophys. Acta 1261:44-56 (1995).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505771
NCBI GeneID	5244
NCBI Accession #	NP_000434.1
NCBI GenBank Nucleotide #	NM_000443.3
UniProt Accession #	P21439; Q14813; A0A2V7; A4D1D3; A4D1D4; A4D1D5; D6W5P3; D6W5P4
Molecular Weight	Calculated MW: 141523
NCBI Official Full Name	phosphatidylcholine translocator ABCB4 isoform A
NCBI Official Synonym Full Names	ATP binding cassette subfamily B member 4
NCBI Official Symbol	ABCB4
NCBI Official Synonym Symbols	GBD1; ICP3; MDR2; MDR3; PGY3; ABC21; MDR2/3; PFIC-3
NCBI Protein Information	phosphatidylcholine translocator ABCB4
UniProt Protein Name	Phosphatidylcholine translocator ABCB4
UniProt Gene Name	ABCB4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.