

ABCB4 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8624b

Specification

ABCB4 Antibody - Product Information

Application	WB,E
Primary Accession	P21439
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	141523

ABCB4 Antibody - Additional Information

Gene ID 5244

Other Names

Multidrug resistance protein 3, 3.6.3.44, ATP-binding cassette sub-family B member 4, P-glycoprotein 3, ABCB4, MDR3, PGY3

Target/Specificity

This ABCB4 antibody is generated from a mouse immunized with a recombinant protein of human ABCB4.

Dilution

WB~~1:4000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ABCB4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ABCB4 Antibody - Protein Information

Name ABCB4 ([HGNC:45](#))

Function [Isoform 1]: 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:[17523162](#), PubMed:[21820390](#), PubMed:[23468132](#), PubMed:[24594635](#), PubMed:[24723470](#), PubMed:[24806754](#), PubMed:[31873305](#), PubMed:[7957936](#), PubMed:[8898203](#), PubMed:[9366571](#)). 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:[28012258](#), PubMed:[9366571](#)). 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

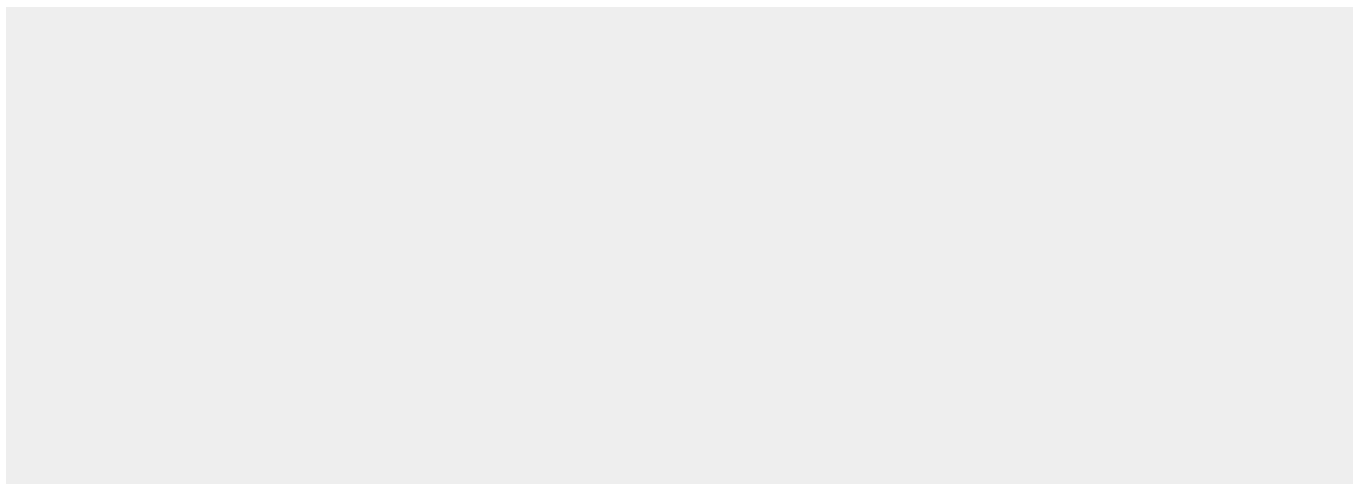
Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441}. Apical cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441}. Membrane raft. Cytoplasm Cytoplasmic vesicle, clathrin-coated vesicle {ECO:0000250|UniProtKB:Q08201}. Note=Localized at the apical 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 pseudocanaliculi 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}

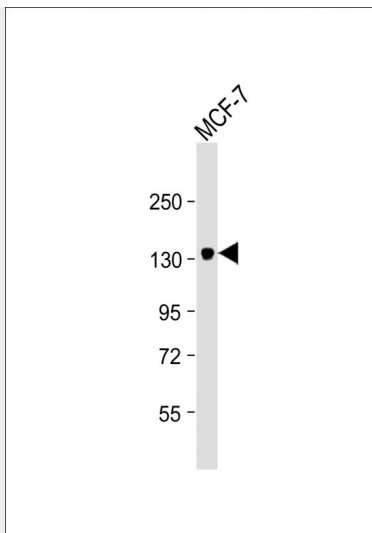
ABCB4 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ABCB4 Antibody - Images





Anti-ABCB4 Antibody at 1:4000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 142 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

ABCB4 Antibody - Background

Mediates ATP-dependent export of organic anions and drugs from the cytoplasm. Hydrolyzes ATP with low efficiency. Not capable of conferring drug resistance. Mediates the translocation of phosphatidylcholine across the canalicular membrane of the hepatocyte.

ABCB4 Antibody - References

- van der Blik 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).