

ABCB6 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6113a

Specification

ABCB6 Antibody (C-term) - Product Information

Application

Primary Accession

Reactivity

Host

Clonality

Isotype

Antigen Region

WB, IHC-P,E

Q9NP58

Human

Rabbit

Polyclonal

Rabbit IgG

812-842

ABCB6 Antibody (C-term) - Additional Information

Gene ID 10058

Other Names

ATP-binding cassette sub-family B member 6, mitochondrial, Mitochondrial ABC transporter 3, Mt-ABC transporter 3, P-glycoprotein-related protein, Ubiquitously-expressed mammalian ABC half transporter, ABCB6, MTABC3, PRP, UMAT

Target/Specificity

This ABCB6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 812-842 amino acids from the C-terminal region of human ABCB6.

Dilution

WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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

ABCB6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ABCB6 Antibody (C-term) - Protein Information

Name ABCB6 (HGNC:47)

Function ATP-dependent transporter that catalyzes the transport of a broad-spectrum of



porphyrins from the cytoplasm to the extracellular space through the plasma membrane or into the vesicle lumen (PubMed:17661442, PubMed:23792964, PubMed:27507172, PubMed:33007128). May also function as an ATP-dependent importer of porphyrins from the cytoplasm into the mitochondria, in turn may participate in the de novo heme biosynthesis regulation and in the coordination of heme and iron homeostasis during phenylhydrazine stress (PubMed:10837493, PubMed:17006453, PubMed:23792964, PubMed:33007128). May also play a key role in the early steps of melanogenesis producing PMEL amyloid fibrils (PubMed:29940187). In vitro, it confers to cells a resistance to toxic metal such as arsenic and cadmium and against chemotherapeutics agent such as 5-fluorouracil, SN-38 and vincristin (PubMed:21266531, PubMed:25202056, PubMed:31053883). In addition may play a role in the transition metal homeostasis (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Mitochondrion outer membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Endosome membrane; Multi-pass membrane protein. Lysosome membrane. Late endosome membrane {ECO:0000250|UniProtKB:O70595}. Early endosome membrane {ECO:0000250|UniProtKB:O70595}. Secreted, extracellular exosome. Mitochondrion. Endosome, multivesicular body membrane. Melanosome membrane. Note=Present in the membrane of mature erythrocytes and in exosomes released from reticulocytes during the final steps of erythroid maturation (PubMed:22655043). Traffics from endoplasmic reticulum to Golgi during its glycans's maturation, therefrom is first targeted to the plasma membrane, and is rapidly internalized through endocytosis to be distributed to the limiting membrane of multivesicular bodies and lysosomes (PubMed:18279659, PubMed:21199866, PubMed:25627919). Localized on the limiting membrane of early melanosomes of pigment cells (PubMed:29940187). Targeted to the endolysosomal compartment (By similarity) {ECO:0000250|UniProtKB:O70595, ECO:0000269|PubMed:18279659, ECO:0000269|PubMed:21199866, ECO:0000269|PubMed:22655043, ECO:0000269|PubMed:25627919, ECO:0000269|PubMed:29940187}

Tissue Location

Widely expressed. High expression is detected in the retinal epithelium (PubMed:10837493, PubMed:22226084). Expressed in mature erythrocytes (PubMed:22655043).

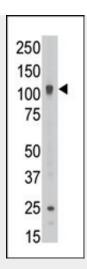
ABCB6 Antibody (C-term) - Protocols

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

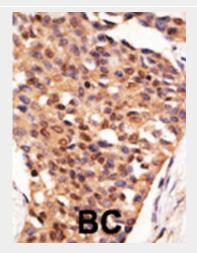
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ABCB6 Antibody (C-term) - Images





The anti-ABCB6 C-term Pab (Cat. #AP6113a) is used in Western blot to detect ABCB6 in HL60 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

ABCB6 Antibody (C-term) - Background

The membrane-associated protein ABCB6 is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance as well as antigen presentation. This half-transporter likely plays a role in mitochondrial function. Localized to 2q26, this gene is considered a candidate gene for lethal neonatal metabolic syndrome, a disorder of mitochondrial function.

ABCB6 Antibody (C-term) - References

Mitsuhashi, N., et al., J. Biol. Chem. 275(23):17536-17540 (2000). Furuya, K.N., et al., Cancer Res. 57(17):3708-3716 (1997). Allikmets, R., et al., Hum. Mol. Genet. 5(10):1649-1655 (1996).