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ABCB6 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6113a

Specification

ABCB6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9NP58

ABCB6 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP6113a was selected from the C-term region of human ABCB6 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ABCB6 Antibody (C-term) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/17006453" target="_blank">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) Blocking Peptide - Protocols

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

- Blocking Peptides

ABCB6 Antibody (C-term) Blocking Peptide - Images

ABCB6 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).