

# **Anti-ABCB6 Antibody**

Catalog # ABO11033

# **Specification**

# **Anti-ABCB6 Antibody - Product Information**

Application
Primary Accession
Host
Reactivity
Clonality
Format
WB, IHC
Q9NP58
Rabbit
Human
Polyclonal
Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for ATP-binding cassette sub-family B member 6, mitochondrial(ABCB6) detection. Tested with WB, IHC-P, ICC in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-ABCB6 Antibody - 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

# Calculated MW 93886 MW KDa

# **Application Details**

Immunocytochemistry , 0.5-1  $\mu$ g/ml, Human, -<br/>spr>Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

# **Subcellular Localization**

Cell membrane. Mitochondrion outer membrane; Multi-pass membrane protein. Endoplasmic reticulum. Golgi apparatus. Endosome . localized to the endosome- like compartement and dendrite tips.

## **Tissue Specificity**

Widely expressed. High expression is detected in the retinal epithelium. .

#### **Protein Name**

ATP-binding cassette sub-family B member 6, mitochondrial

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

## **Immunogen**



A synthetic peptide corresponding to a sequence at the C-terminus of human ABCB6(818-842aa YADMWQLQQGQEETSEDTKPQTMER).

Purification Immunogen affinity purified.

**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. Heavy Metal importer (TC 3.A.1.210) subfamily.

# **Anti-ABCB6 Antibody - 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:<a href="http://www.uniprot.org/citations/17661442" target="\_blank">17661442</a>, PubMed:<a href="http://www.uniprot.org/citations/23792964" target="\_blank">23792964</a>, PubMed:<a href="http://www.uniprot.org/citations/27507172" target="\_blank">27507172</a>, PubMed:<a href="http://www.uniprot.org/citations/33007128" target="blank">33007128</a>). 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:<a href="http://www.uniprot.org/citations/10837493" target="\_blank">10837493</a>, PubMed:<a href="http://www.uniprot.org/citations/17006453" target="blank">17006453</a>, PubMed:<a href="http://www.uniprot.org/citations/23792964" target="\_blank">23792964</a>, PubMed:<a href="http://www.uniprot.org/citations/33007128" target="\_blank">33007128</a>). May also play a key role in the early steps of melanogenesis producing PMEL amyloid fibrils (PubMed: <a href="http://www.uniprot.org/citations/29940187" target=" blank">29940187</a>). 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: <a href="http://www.uniprot.org/citations/21266531" target=" blank">21266531</a>, PubMed:<a href="http://www.uniprot.org/citations/25202056" target="\_blank">25202056</a>, PubMed:<a href="http://www.uniprot.org/citations/31053883" target="blank">31053883</a>). 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:070595}. Early endosome membrane {ECO:0000250|UniProtKB:070595}. 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:070595, ECO:0000269|PubMed:18279659, ECO:0000269|PubMed:21199866, ECO:0000269|PubMed:22655043, ECO:0000269|PubMed:25627919, ECO:0000269|PubMed:29940187}

## **Tissue Location**

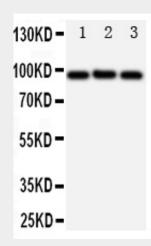
Widely expressed. High expression is detected in the retinal epithelium (PubMed:10837493, PubMed:22226084). Expressed in mature erythrocytes (PubMed:22655043).

# **Anti-ABCB6 Antibody - Protocols**

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

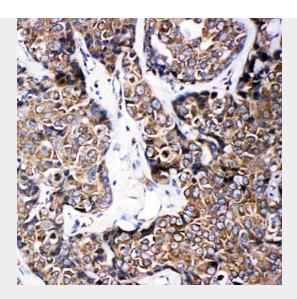
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-ABCB6 Antibody - Images**



Anti-ABCB6 antibody, ABO11033, Western blottingAll lanes: Anti ABCB6 (ABO11033) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: A549 Whole Cell Lysate at 40ugPredicted bind size: 94KDObserved bind size: 94KD





Anti-ABCB6 antibody, ABO11033, IHC(P)IHC(P): Human Mammary Cancer Tissue

# Anti-ABCB6 Antibody - Background

ABCB6, ATP-binding cassette sub-family B member 6, mitochondrialis a protein that in humans is encoded by the ABCB6 gene. The membrane-associated protein encoded by this gene 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.