

Anti-ABCB6 (RABBIT) Antibody
ABCB6 Antibody
Catalog # ASR5365**Specification**

Anti-ABCB6 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Dog
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	This affinity-purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 94 kDa in size corresponding to ABCB6 protein by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 430-465 of human ABCB6 protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-ABCB6 (RABBIT) Antibody - Additional Information**Gene ID** 10058**Other Names**
10058**Purity**

This affinity-purified antibody is directed against human ABCB6 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with ABCB6 protein from human and dog based on 100% homology with the immunizing sequence. Expect partial reactivity with ABCB6 from mouse and rat sources based on partial (~93%, 15/16) sequence homology. Reactivity against homologues from other sources is not known.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-ABCB6 (RABBIT) 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: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

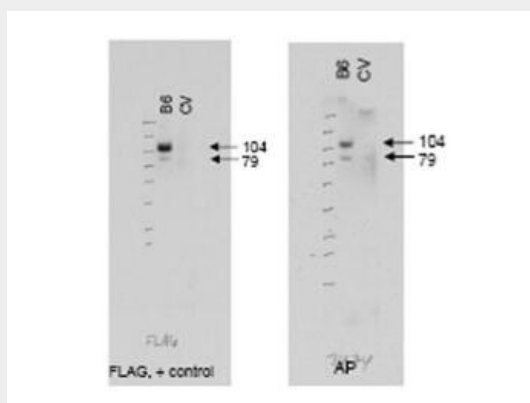
Widely expressed. High expression is detected in the retinal epithelium (PubMed:10837493, PubMed:22226084). Expressed in mature erythrocytes (PubMed:22655043).

Anti-ABCB6 (RABBIT) 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](#)

Anti-ABCB6 (RABBIT) Antibody - Images



Western blot using Rockland's affinity purified anti-ABCB6 antibody (right panel, lane B6) shows detection of Flag tagged human ABCB6 protein at 104 kDa and a truncated form of the protein at 79 kDa (arrowheads). The antibody successfully detected ABCB6 in KB cells transfected with the ABCB6 protein. A lysate prepared from KB cells without a vector insert (CV lane) showed no reactivity with the antibody. The left panel shows a similar staining pattern using an anti-Flag™ antibody as a positive control. The membrane was probed with the primary antibody diluted to 1:1,400. Personal Communication, Jill Paterson, CCR-NCI, Bethesda, MD.

Anti-ABCB6 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. ABCB6 (ATP-binding cassette sub-family B member 6) is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABCB6 is a membrane-associated protein that transports various molecules across the extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, DR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily confer multi-drug resistance (MDR) to cancer cells and are also involved in antigen presentation. ABCB6 also 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. Anti-ABCB6 is ideal for researchers interested in heme synthesis.