

Anti-ABCB10 Picoband Antibody
Catalog # ABO12656**Specification**

Anti-ABCB10 Picoband Antibody - Product Information

Application	WB
Primary Accession	Q9NRK6
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for ATP-binding cassette sub-family B member 10, mitochondrial(ABCB10) detection. Tested with WB in Human;Rat.

Reconstitution

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

Anti-ABCB10 Picoband Antibody - Additional Information

Gene ID 23456

Other Names

ATP-binding cassette sub-family B member 10, mitochondrial, ATP-binding cassette transporter 10, ABC transporter 10 protein, Mitochondrial ATP-binding cassette 2, M-ABC2, ABCB10

Calculated MW

79148 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Mitochondrion inner membrane; Multi-pass membrane protein.

Tissue Specificity

Ubiquitous. Highly expressed in bone marrow, expressed at intermediate to high levels in skeletal muscle, small intestine, thyroid, heart, brain, placenta, liver, pancreas, prostate, testis, ovary, leukocyte, stomach, spinal cord, lymph node, trachea and adrenal gland, and low levels are found in lung, kidney, spleen, thymus and colon.

Protein Name

ATP-binding cassette sub-family B member 10, mitochondrial

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ABCB10 (640-678aa

QRIAIARALLKNPKILLLLDEATSALDAENEYLVQEALDR), different from the related mouse sequence by one amino acid.

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.

Anti-ABCB10 Picoband Antibody - Protein Information

Name ABCB10 ([HGNC:41](#))

Function

Catalyzes the export of an unknown physiological substrate from the mitochondrial matrix to the cytosol in an ATP-dependent manner (PubMed:33253225). May also transport the heme analog Zn (II) mesoporphyrin (ZnMP) in an ATP dependent manner but can't export the heme precursor 5-aminolevulinic acid (ALA) from mitochondria (PubMed:33253225). Plays a role in the early step of the heme biosynthetic process during insertion of iron into protoporphyrin IX (PPIX). In turn participates in hemoglobin synthesis and also protects against oxidative stress (PubMed:28808058, PubMed:22085049). In addition may be involved in mitochondrial unfolded protein response (UPRmt) signaling pathway, although ABCB10 probably does not participate in peptide export from mitochondria (PubMed:28315685).

Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:Q9J139}; Multi-pass membrane protein

Tissue Location

Ubiquitous. Highly expressed in bone marrow, expressed at intermediate to high levels in skeletal muscle, small intestine, thyroid, heart, brain, placenta, liver, pancreas, prostate, testis, ovary, leukocyte, stomach, spinal cord, lymph node, trachea and adrenal gland, and low levels are found in lung, kidney, spleen, thymus and colon

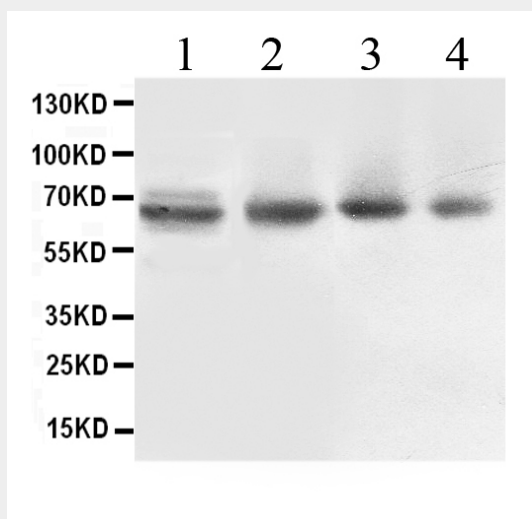
Anti-ABCB10 Picoband Antibody - Protocols

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-ABCB10 Picoband Antibody - Images



Western blot analysis of ABCB10 expression in rat cardiac muscle extract (lane 1), COLO320 whole cell lysates (lane 2), 22RV1 whole cell lysates (lane 3) and PANC whole cell lysates (lane 4). ABCB10 at 79KD, 65KD was detected using rabbit anti- ABCB10 Antigen Affinity purified polyclonal antibody (Catalog # ABO12656) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-ABCB10 Picoband Antibody - Background

ABCB10, also known as M-ABC2, is expressed as a 60-kD nonglycosylated mitochondrial membrane protein. This ABCB10 gene is mapped to 1q42.13. 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. And 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. The function of this mitochondrial protein is unknown.