10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-ABCB10 Picoband Antibody

Catalog # ABO12656

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.

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
Application Details	Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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 NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ABCB10 (640-678aa QRIAIARALLKNPKILLLDEATSALDAENEYLVQEALDR), 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.

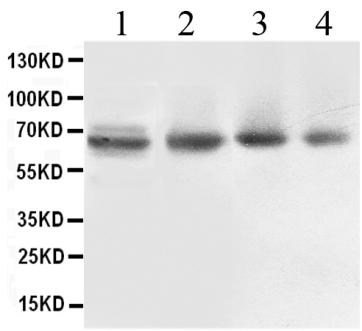
Protein Information

Name	ABCB10 (HGNC:41)
Function	ATP-dependent transporter located in the mitochondrial inner membrane that catalyzes the export of biliverdin from the mitochondrial matrix, and plays a crucial role in hemoglobin synthesis and antioxidative stress (PubMed:22085049, PubMed:28315685, PubMed:28808058, PubMed:34011630, PubMed:37041204). Participates in the early step of the heme biosynthetic process during insertion of iron into protoporphyrin IX (PPIX) (PubMed:22085049, PubMed:28808058). Involved in the stabilization of the iron transporter mitoferrin- 1/SLC25A37 (By similarity). 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:Q9JI39}; 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.

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.

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 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.