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ABCB10 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6109a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NRK6
Other Accession	NP_036221
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB01807
Calculated MW	79148
Antigen Region	1-27

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
Target/Specificity	This ABCB10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-27 amino acids from the N-terminal region of human ABCB10.
Dilution	WB~~1:1000-1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ABCB10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

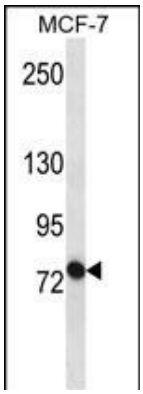
Background

The membrane-associated protein ABCB10 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. The function of this mitochondrial protein is unknown.

References

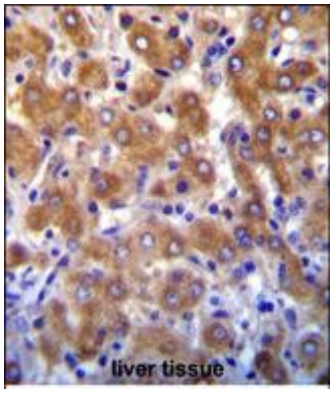
Zhang, F., et al., J. Biol. Chem. 275(30):23287-23294 (2000). Allikmets, R., et al., Mamm. Genome 6(2):114-117 (1995). Zhang, F., et al., FEBS Lett. 478 (1-2), 89-94 (2000).

Images



ABCB10 Antibody (S16) (Cat. #AP6109a) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the ABCB10 antibody detected the ABCB10 protein (arrow).

ABCB10 antibody (N-term) (Cat. #AP6109a)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ABCB10 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



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