

ABCB10 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6109a

Specification

ABCB10 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q9NRK6
Other Accession	NP_036221
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Antigen Region	1-27

ABCB10 Antibody (N-term) - 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

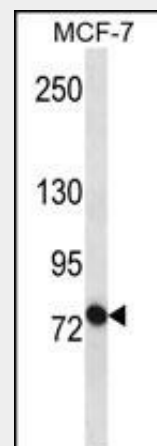
IHC-P~~1:10~50

Format

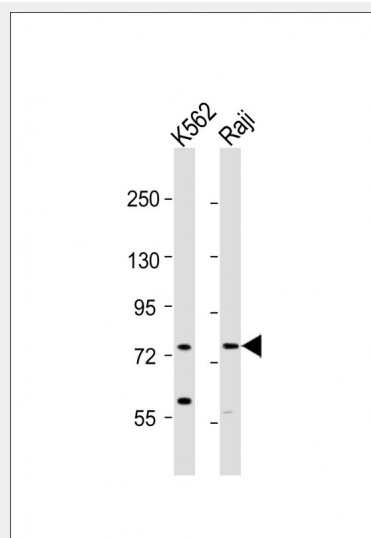
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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.



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).



All lanes : Anti-ABCB10 Antibody (S16) at 1:1000-1:2000 dilution Lane 1: K562 whole cell lysates Lane 2: Raji whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 79 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Precautions

ABCB10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ABCB10 Antibody (N-term) - Protein Information

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

Function

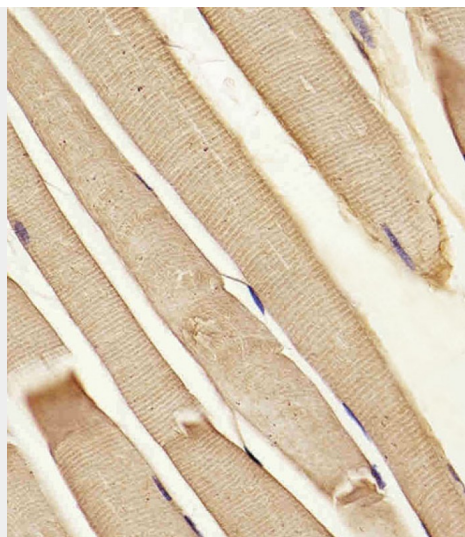
Catalyzes the export of an unknown physiological substrate from the mitochondrial matrix to the cytosol in an ATP-dependent manner (PubMed:33253225). May also transport the heme analog Zn (II) mesoporphyrin (ZnMP) in an ATP dependent manner but can't export the heme precursor 5-aminolevulinic acid (ALA) 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

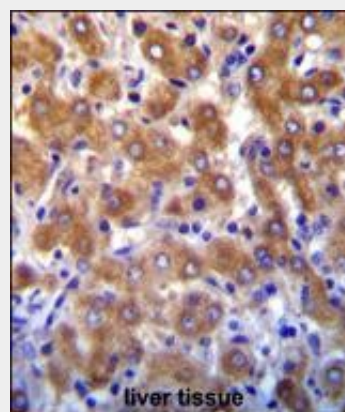
Mitochondrion inner membrane
{ECO:0000250|UniProtKB:Q9J139};
Multi-pass membrane protein

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



AP6109a staining hABCB10 in Human skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



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.

ABCB10 Antibody (N-term) - Background

ABCB10 Antibody (N-term) - 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](#)

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.

ABCB10 Antibody (N-term) - 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).