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Anti-ABCB10 Antibody

Catalog # AP59819

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9NRK6
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79148

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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ABCB10. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

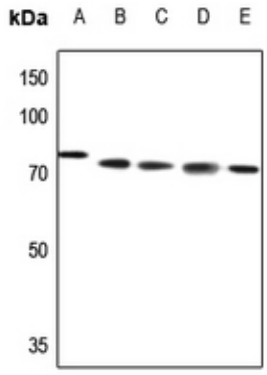
Name	ABCB10 (HGNC:41)
Function	ATP-dependent transporter located in the mitochondrial inner membrane that catalyzes the export of biliverdin from the mitochondrial matrix, and plays a crucial role in hemoglobin synthesis and antioxidative stress (PubMed:22085049, PubMed:28315685, PubMed:28808058, PubMed:34011630, 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

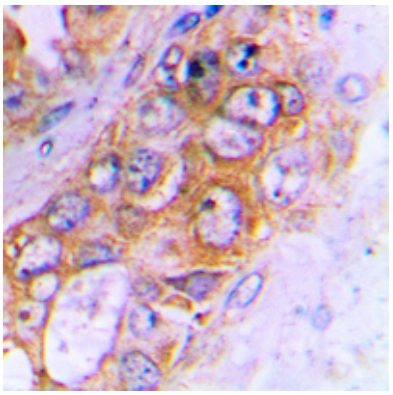
Tissue Location

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.

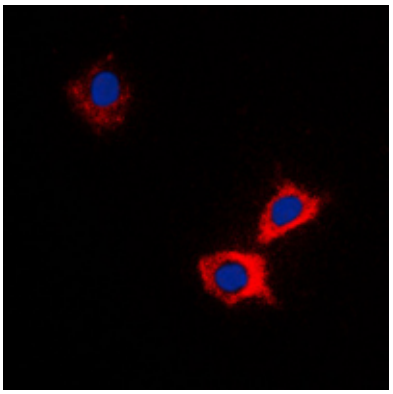
Images



Western blot analysis of ABCB10 expression in HEK293T (A), mouse lung (B), mouse liver (C), rat lung (D), rat liver (E) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 79 kD)

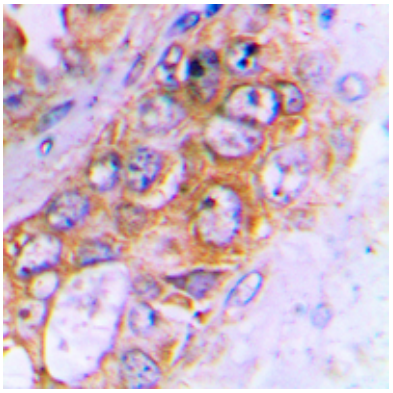


Immunohistochemical analysis of ABCB10 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of ABCB10 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of ABCB10 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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