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ABCB5 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1779a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q2M3G0
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5H3C6
Isotype	IgG1
Calculated MW	138641
Description	ABCB5 belongs to the ATP-binding cassette (ABC) transporter superfamily of integral membrane proteins. These proteins participate in ATP-dependent transmembrane transport of structurally diverse molecules ranging from small ions, sugars, and peptides to more complex organic molecules
Immunogen	Purified recombinant fragment of human ABCB5 (AA: 481-674) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	340273
Other Names	ATP-binding cassette sub-family B member 5, ABCB5 P-gp, P-glycoprotein ABCB5, ABCB5
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ABCB5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ABCB5 (HGNC:46)
Function	Energy-dependent efflux transporter responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:12960149,

PubMed:15205344, PubMed:15899824, PubMed:22306008). Specifically present in limbal stem cells, where it plays a key role in corneal development and repair (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441, ECO:0000269|PubMed:12960149}

Tissue Location

Expressed by CD133-expressing progenitor cells among epidermal melanocytes (at protein level). Widely expressed with specific expression in pigment cells. Highly expressed in several malignant tissues: highly expressed in clinical melanomas, with low expression in normal skin. In melanoma, marks malignant melanoma- initiating cells (MMIC), in which clinical virulence resides as a consequence of unlimited self-renewal capacity, resulting in inexorable tumor progression and metastasis. Also highly expressed in a number of leukemia cells. Expressed in basal limbal epithelium

References

1.Gastroenterology. 2011 Jan;140(1):344-55. 2.Cancer Res. 2011 Aug 1;71(15):5307-16.

Images

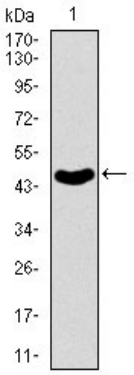


Figure 1: Western blot analysis using ABCB5 mAb against human ABCB5 recombinant protein. (Expected MW is 47 kDa)

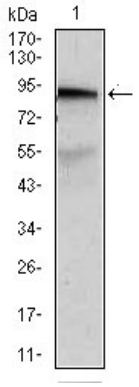


Figure 2: Western blot analysis using ABCB5 mouse mAb against A431 (1) cell lysate.

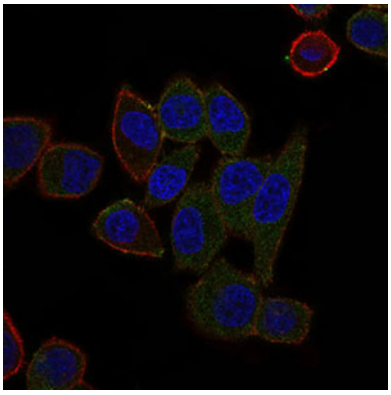


Figure 3: Immunofluorescence analysis of HepG2 cells using ABCB5 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

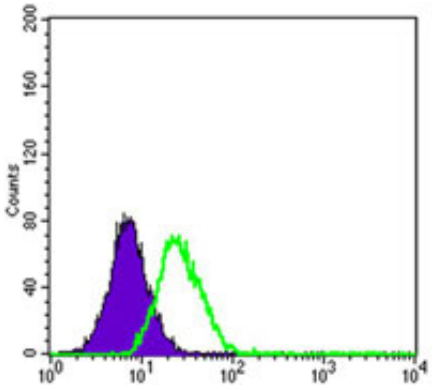


Figure 4: Flow cytometric analysis of HepG2 cells using ABCB5 mouse mAb (green) and negative control (purple).

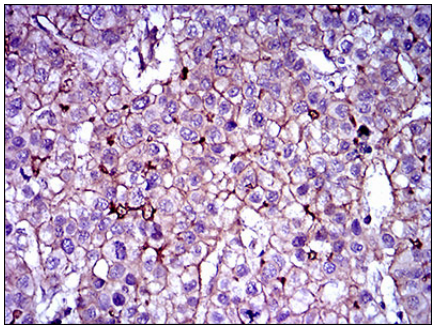


Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using ABCB5 mouse mAb with DAB staining.

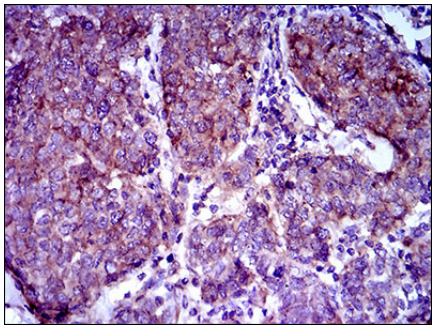


Figure 6: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using ABCB5 mouse mAb with DAB staining.

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