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

ABCB5 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1779a

Specification

ABCB5 Antibody - Product Information

Application	**WB, IHC, FC, ICC, E**
Primary Accession	Q2M3G0
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**89.8kDa KDa**

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

ABCB5 Antibody - 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.

ABCB5 Antibody - Protein Information

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

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).

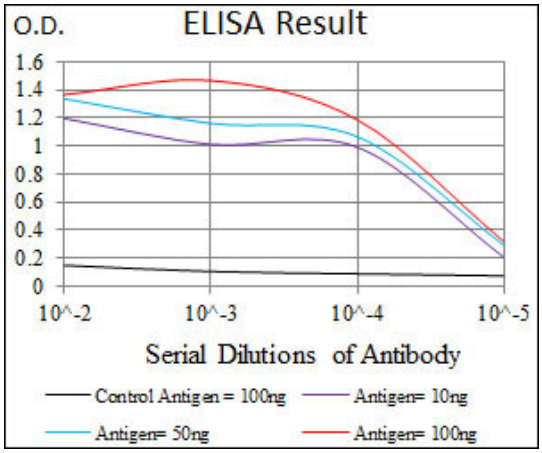
Cellular Location
Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441, ECO:0000269|PubMed:12960149}

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

ABCB5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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

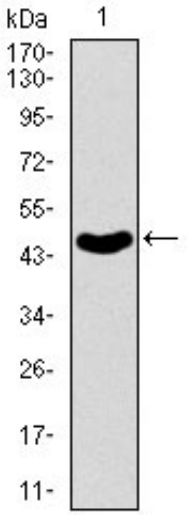


Figure 1: Western blot analysis using ABCB5 mAb against human ABCB5 recombinant protein. (Expected MW is 47 kDa)

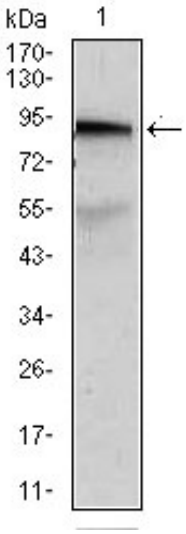


Figure 2: Western blot analysis using ABCB5 mouse mAb against A431 (1) cell lysate.

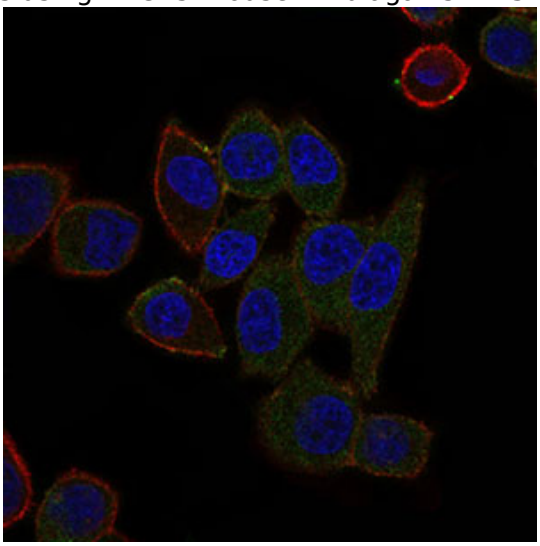


Figure 3: Immunofluorescence analysis of HepG2 cells using ABCB5 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

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

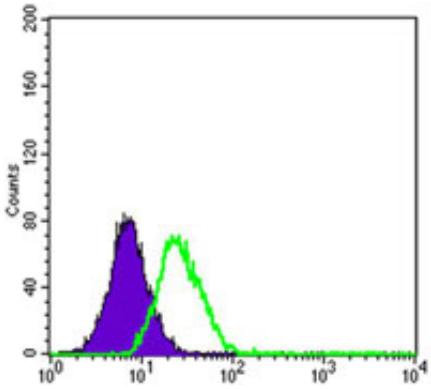


Figure 4: Flow cytometric analysis of HepG2 cells using ABCB5 mouse mAb (green) and negative control (purple).

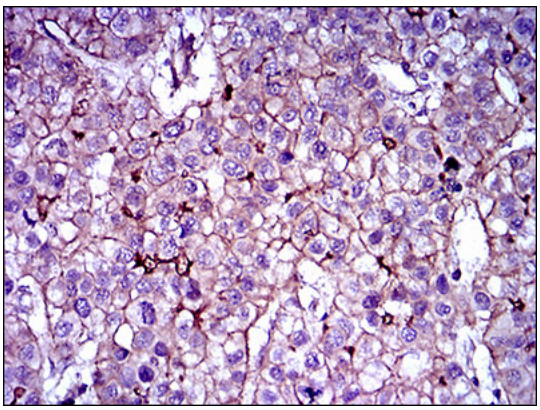


Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using ABCB5 mouse mAb with DAB staining.

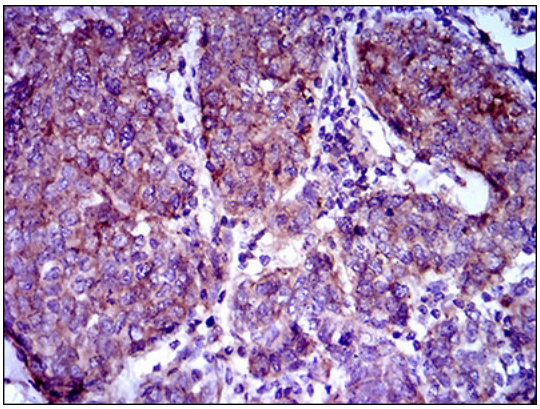


Figure 6: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using ABCB5 mouse mAb with DAB staining.

ABCB5 Antibody - References

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