

**ABCB5 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1779a****Specification****ABCB5 Antibody - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | <b>E, WB, IF, FC, IHC</b> |
| Primary Accession | <a href="#">Q2M3G0</a>    |
| Reactivity        | <b>Human</b>              |
| Host              | <b>Mouse</b>              |
| Clonality         | <b>Monoclonal</b>         |
| Isotype           | <b>IgG1</b>               |
| Calculated MW     | <b>89.8kDa KDa</b>        |

**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**

E~~1/10000  
WB~~1/500 - 1/2000  
IF~~1/200 - 1/1000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**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**

Name ABCB5 ([HGNC:46](#))

### Function

Energy-dependent efflux transporter responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:[12960149](http://www.uniprot.org/citations/12960149), PubMed:[15205344](http://www.uniprot.org/citations/15205344), PubMed:[15899824](http://www.uniprot.org/citations/15899824), PubMed:[22306008](http://www.uniprot.org/citations/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}

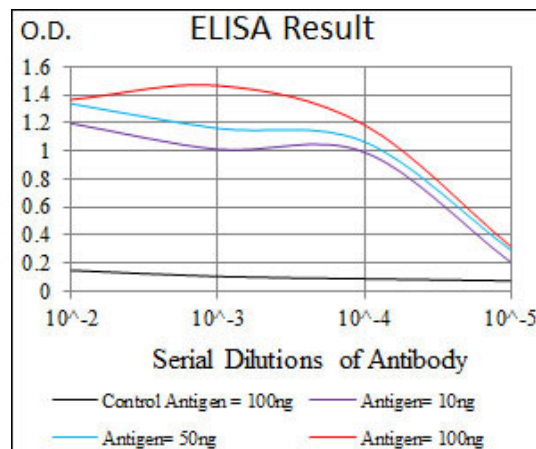
### Tissue Location

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 Cytometry](#)
- [Cell Culture](#)



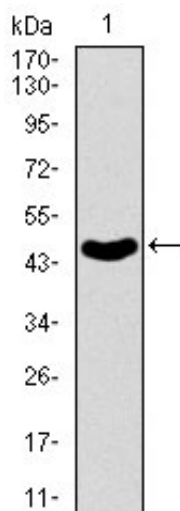


Figure 1: Western blot analysis using ABCB5 mAb against human ABCB5 recombinant protein. (Expected MW is 47 kDa)

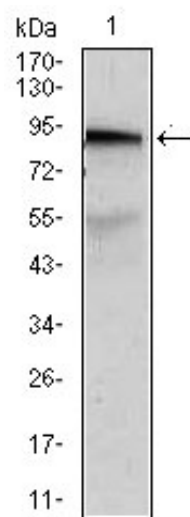


Figure 2: Western blot analysis using ABCB5 mouse mAb against A431 (1) cell lysate.

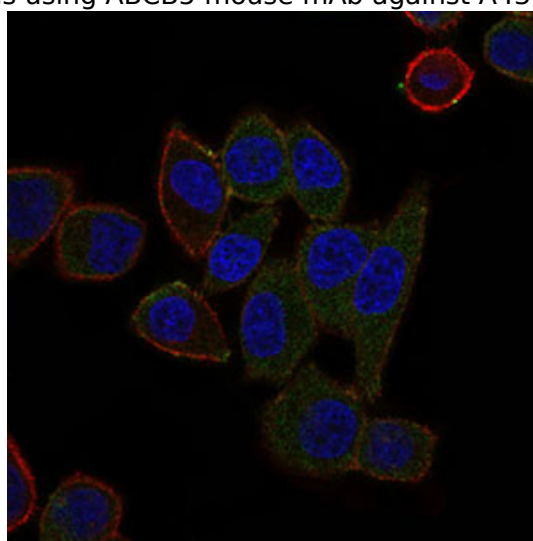


Figure 3: Immunofluorescence analysis of HepG2 cells using ABCB5 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

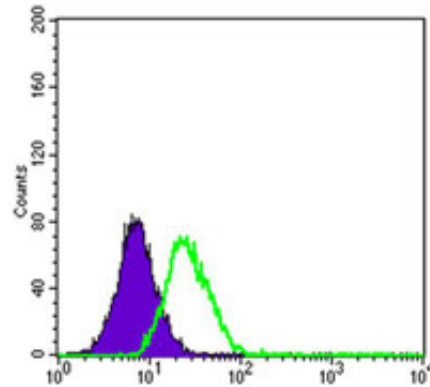


Figure 4: Flow cytometric analysis of HepG2 cells using ABCB5 mouse mAb (green) and negative control (purple).

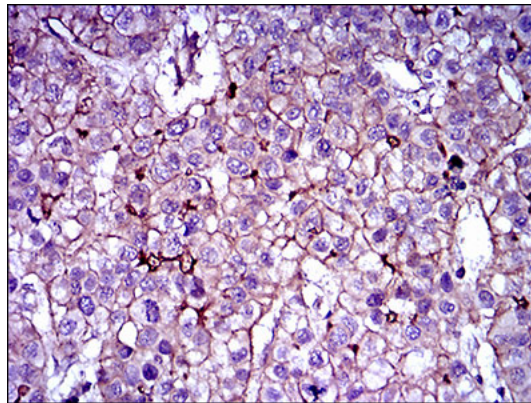


Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using ABCB5 mouse mAb with DAB staining.

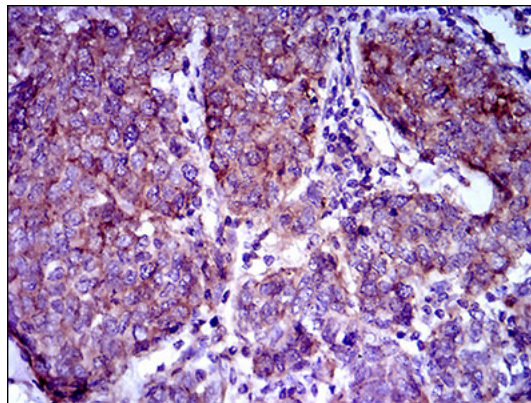


Figure 6: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using ABCB5 mouse mAb with DAB staining.

#### ABCB5 Antibody - References

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