

ABCB5 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6122a**Specification**

ABCB5 Antibody (N-term) - Product Information

Application	FC, WB,E
Primary Accession	Q2M3G0
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

ABCB5 Antibody (N-term) - Additional Information**Gene ID** 340273**Other Names**

ATP-binding cassette sub-family B member 5, ABCB5 P-gp, P-glycoprotein ABCB5, ABCB5

Target/Specificity

This ABCB5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human ABCB5.

Dilution

FC~~1:25

WB~~1:2000

E~~Use at an assay dependent concentration.

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.

Precautions

ABCB5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ABCB5 Antibody (N-term) - 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

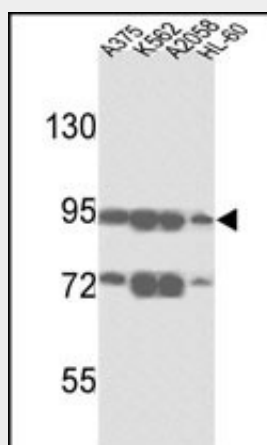
Expressed by CD133-expressing progenitor cells among epidermal melanocytes (at protein level). Widely expressed with specific expression in pigment cells. Highly expressed in several malignant tissues: highly expressed in clinical melanomas, with low expression in normal skin. In melanoma, marks malignant 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

ABCB5 Antibody (N-term) - Protocols

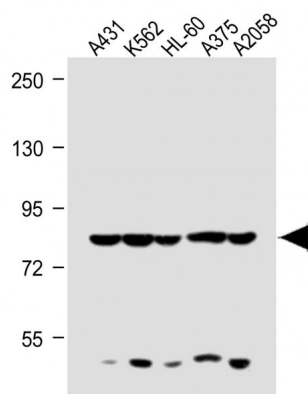
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

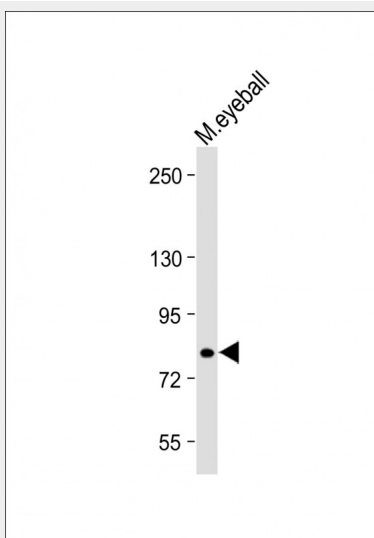
ABCB5 Antibody (N-term) - Images



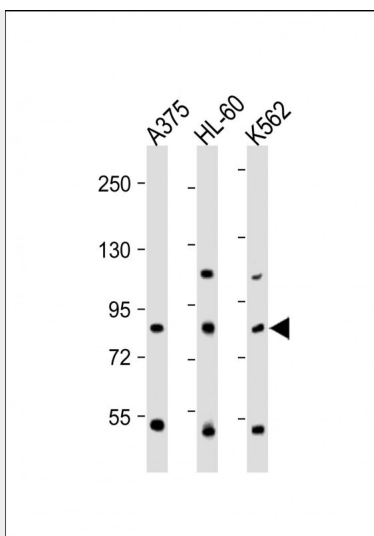
Western blot analysis of ABCB5 Antibody (N-term) (Cat.#AP6122a) in A375, K562, A2058 and HL-60 cell line lysates (35ug/lane). ABCB5 (arrow) was detected using the purified Pab.



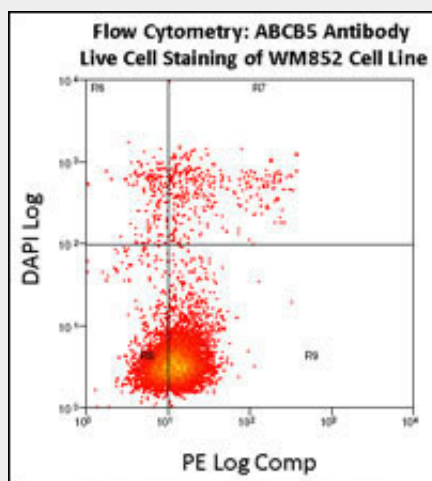
All lanes : Anti-ABCB5 Antibody (N-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: HL-60 whole cell lysate Lane 4: A375 whole cell lysate Lane 5: A2058 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 138 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



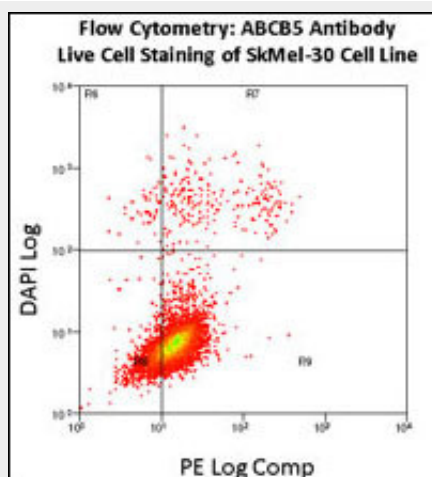
Anti-ABCB5 Antibody (N-term) at 1:2000 dilution + Mouse eyeball lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 138 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



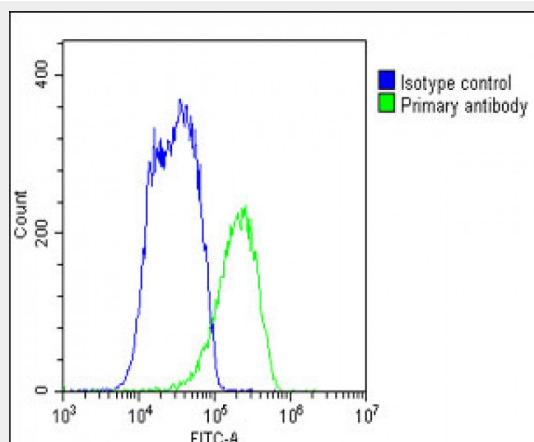
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Flow Cytometry using ABCB5 Antibody (N-Term) Cat.# AP6122a on WM852 cell line. Live cell staining utilized PE-conjugated goat anti-rabbit (Jackson ImmunoResearch) as a secondary antibody. Analysis was done on an FC500 flow cytometer. Data courtesy of Dr. Steve Reuland, University of Colorado, Denver



Flow Cytometry using ABCB5 Antibody (N-Term) Cat.# AP6122a on SkMel-30 cell line. Live cell staining utilized PE-conjugated goat anti-rabbit (Jackson ImmunoResearch) as a secondary antibody. Analysis was done on an FC500 flow cytometer. Data courtesy of Dr. Steve Reuland, University of Colorado, Denver



Overlay histogram showing HepG2 cells stained with AP6122a (green line). The cells were fixed with 2% paraformaldehyde 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP6122a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

ABCB5 Antibody (N-term) - Background

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.

ABCB5 Antibody (N-term) - References

Frank, N.Y., Cancer Res. 65 (10), 4320-4333 (2005) Chen, K.G., Pigment Cell Res. 18 (2), 102-112 (2005) Frank, N.Y., J. Biol. Chem. 278 (47), 47156-47165 (2003)

ABCB5 Antibody (N-term) - Citations

- [Targeting the ABC transporter ABCB5 sensitizes glioblastoma to temozolomide-induced apoptosis through a cell-cycle checkpoint regulation mechanism.](#)
- [Side population cells from human melanoma tumors reveal diverse mechanisms for chemoresistance.](#)
- [CD133+ melanoma subpopulations contribute to perivascular niche morphogenesis and tumorigenicity through vasculogenic mimicry.](#)
- [Evaluation of a multi-marker immunomagnetic enrichment assay for the quantification of circulating melanoma cells.](#)
- [ABCB5 identifies a therapy-refractory tumor cell population in colorectal cancer patients.](#)
- [Melanoma spheroids grown under neural crest cell conditions are highly plastic migratory/invasive tumor cells endowed with immunomodulator function.](#)