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

Goat Anti-ABCB5 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1007a

Specification

Goat Anti-ABCB5 Antibody - Product Information

Application	**WB, FC, E**
Primary Accession	Q2M3G0
Other Accession	NP_848654, 340273
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**138641**

Goat Anti-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~~1:1000
FC~~1:10~50
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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
Goat Anti-ABCB5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ABCB5 Antibody - Protein Information

Name ABCB5 (HGNC:46)

Function
Energy-dependent efflux transporter responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:<a href="http://www.uniprot.org/citations/12960149"

target="_blank">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}

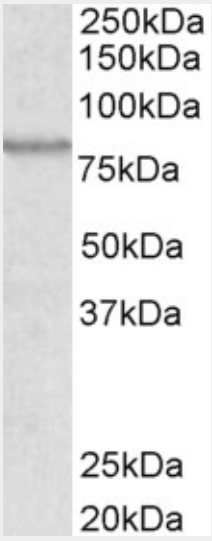
Tissue Location
Expressed by CD133-expressing progenitor cells among epidermal melanocytes (at protein level). Widely expressed with specific expression in pigment cells. Highly expressed in several malignant tissues: highly expressed in clinical melanomas, with low expression in normal skin. In melanoma,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

Goat Anti-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

Goat Anti-ABCB5 Antibody - Images



AF1007a (0.3 µg/ml) staining of lysates of cell line A431 (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ABCB5 Antibody - 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 (Chen et al., 2005 [PubMed 15760339]).

Goat Anti-ABCB5 Antibody - References

ABCB5 gene amplification in human leukemia cells. Frank NY, et al. Leuk Res, 2009 Oct. PMID 19477512.
Identification of cells initiating human melanomas. Schatton T, et al. Nature, 2008 Jan 17. PMID 18202660.
The Role of heat shock protein 27 in extravillous trophoblast differentiation. Matalon ST, et al. J Cell Biochem, 2008 Feb 15. PMID 17661346.
ABCB5-mediated doxorubicin transport and chemoresistance in human malignant melanoma. Frank NY, et al. Cancer Res, 2005 May 15. PMID 15899824.
Principal expression of two mRNA isoforms (ABCB 5alpha and ABCB 5beta) of the ATP-binding cassette transporter gene ABCB 5 in melanoma cells and melanocytes. Chen KG, et al. Pigment Cell Res, 2005 Apr. PMID 15760339.