

Anti-ABCB5 (RABBIT) Antibody - 600-401-A77
Code: 600-401-A77

Size: 100 µg

Product Description: Anti-ABCB5 (RABBIT) Antibody - 600-401-A77

Concentration: 1.1 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	ABCB5
Species Reactivity	human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store Anti-ABCB5 at -20° C prior to opening. Aliquot antibody and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	rabbit anti-ABCB5 Antibody, ABCB 5, ABCB-5, ATP binding cassette sub family B (MDR/TAP) member 5 antibody, ATP binding cassette sub family B member 5 antibody, EST422562 antibody, P glycoprotein ABCB5 antibody
Application Note	This affinity purified ABCB5 antibody has been tested for use in ELISA, IHC, and western blotting. Specific conditions for reactivity should be optimized by the end user.
Background	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Anti-ABCB5 Antibody is a ATP-Binding Cassette protein. ABCB5 is a novel member of the human P-glycoprotein family. It functions as a determinant of membrane potential and regulator of cell fusion in physiologic skin progenitor cells. Cell fusion is thought to contribute to tissue differentiation. ABCB5 is predominantly expressed in melanoma cells and is a novel molecular marker for a distinct subset of chemoresistant stem cell phenotype-expressing tumor cells among human epidermal melanocytes. ABCB5 is a rhodamine efflux transporter. This antibody product is intended to be used to confirm cellular localization and expression level of ABCB5. ABCB5 antibody is ideal for Cancer and Signal Transduction research.
Purity And Specificity	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for human ABCB5 protein. A BLAST analysis was used to suggest partial cross-reactivity with ABCB5 from monkey (85% homology), rat (68% homology) and mouse (62% homology) sources. Cross-reactivity with ABCB5 from other sources has not been determined.
Assay Dilutions	User Optimized
ELISA	1:10,000 - 1:50,000
Western Blot	1:20,000
Immunohistochemistry	1:200
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	ABCB5 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to residues corresponding to an internal region of human ABCB5.
General Reference	Frank NY, Margaryan A, Huang Y, Schatton T, Waaga-Gasser AM, Gasser M, Sayegh MH, Sadee W, Frank MH. (2005) ABCB5-mediated doxorubicin transport and chemoresistance in human malignant melanoma. <i>Cancer Res.</i> 65(10):4320-33. Chen KG, Szakacs G, Annereau JP, Rouzaud F, Liang XJ, Valencia JC, Nagineni CN, Hooks JJ, Hearing VJ, Gottesman MM. (2005) 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. <i>Pigment Cell Res.</i> 18(2):102-12. Chen KG, Gottesman MM. (2005) Useful tool to generate unidirectional deletion vectors by utilizing the star activity of BamHI in an NcoI-BamHI-XhoI cassette. <i>Biotechniques.</i> 38(2):198, 200, 202, 204.
Related Products	

009-001-B99	VEGF-165 Human Recombinant Protein - 009-001-B99
009-001-C23	VEGF-121 Human Recombinant Protein - 009-001-C23
200-401-B74	Anti-Bovine VEGF-A (RABBIT) Antibody - 200-401-B74
200-401-B74S	Anti-Bovine VEGF-A (RABBIT) Antibody - 200-401-B74S

Related Links

NCBI - 56849536

<http://www.ncbi.nlm.nih.gov/protein/56849536>

UniProtKB - Q2M3G0

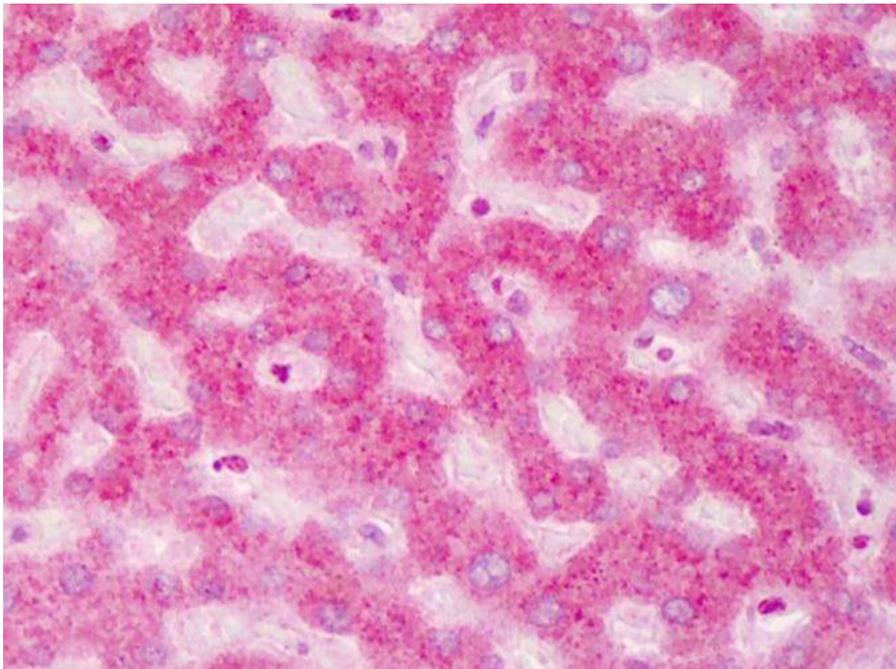
<http://www.uniprot.org/uniprot/Q2M3G0>

GeneID - 340273

Images

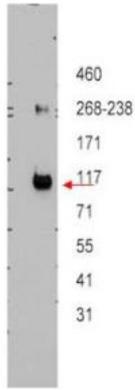
1

Immunohistochemistry of ABCB5 antibody. Tissue: human liver. Fixation: formalin fixed paraffin embedded. Antigen retrieval: user optimized. Primary antibody: ABCB5 at 1:200. Secondary antibody: Peroxidase goat anti-rabbit at 1:10,000 for 45 min at RT. Localization: Moderate to strong cytoplasmic and membranous staining was observed in hepatocytes. Occasional nuclear staining was observed in hepatocytes and sinusoidal cells. Staining: antibody as precipitated red signal with a hematoxylin purple nuclear counterstain.



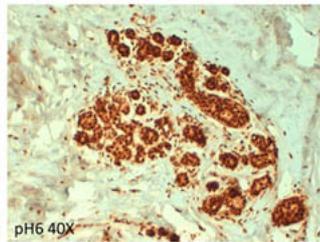
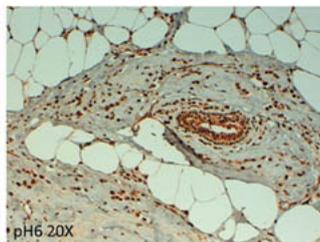
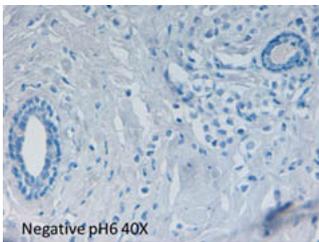
2

Western blot using Rockland's affinity purified anti-ABCB5 antibody shows detection of ABCB5 beta in ~12.5 ug of transfected-Hi5 whole cell lysate. No reaction was seen when antibody was pre-incubated with the immunizing peptide (data not shown). A 3-8% Tris-acetate gel was used for separation. The arrowhead corresponds to 117 kDa ABCB5. The membrane was probed with the primary antibody at a 1:10,000 dilution in 5% milk in TBST at 4° C, overnight. Personal Communication, JP Gillet, CCR-NCI, Bethesda, MD.



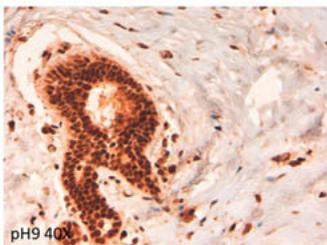
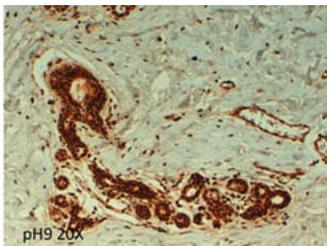
3

Immunohistochemistry of Rabbit anti ABCB5 antibody. Tissue: human breast carcinoma at pH6. (left, neg control) (right, 20X, 40X). Fixation: formalin fixed paraffin embedded. Primary antibody: ABCB5 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ABCB5 is cytoplasmic. Staining: ABCB5 as precipitated brown signal with hematoxylin purple nuclear counterstain.



4

Immunohistochemistry of Rabbit anti ABCB5 antibody. Tissue: human breast carcinoma at pH9. (20X, 40X). Fixation: formalin fixed paraffin embedded. Primary antibody: ABCB5 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ABCB5 is cytoplasmic. Staining: ABCB5 as precipitated brown signal.



Disclaimer

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