

ABCB5 (A-7): sc-515910



The Power to Question

BACKGROUND

ATP-binding cassette (ABC) transporters are an evolutionarily conserved family of proteins that catalyze the transport of molecules across extracellular and intracellular membranes by harnessing the energy of ATP hydrolysis. ABCB5 (ATP-binding cassette sub-family B member 5), also known as P-glycoprotein ABCB5 or ABCB5 P-gp, is a 812 amino acid multi-pass membrane protein that belongs to the superfamily of ABC transporters. Expressed ubiquitously, ABCB5 contains two ABC transporter domains and one ABC transmembrane type-1 domain and is responsible for the resistance to doxorubicin of a subset of malignant melanomas. It is suggested ABCB5 inhibits tumor growth and is thought to be a novel drug transporter and chemoresistance mediator in melanoma cells. Two isoforms of ABCB5, designated α and β , exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ABCB5 (human) mapping to 7p21.1; Abcb5 (mouse) mapping to 12 F2.

SOURCE

ABCB5 (A-7) is a mouse monoclonal antibody raised against amino acids 497-551 mapping within an internal region of ABCB5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

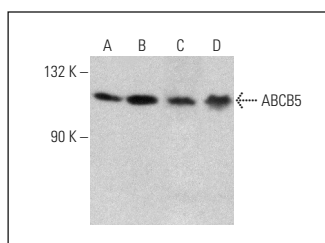
ABCB5 (A-7) is recommended for detection of ABCB5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ABCB5 siRNA (h): sc-89856, ABCB5 siRNA (m): sc-140756, ABCB5 shRNA Plasmid (h): sc-89856-SH, ABCB5 shRNA Plasmid (m): sc-140756-SH, ABCB5 shRNA (h) Lentiviral Particles: sc-89856-V and ABCB5 shRNA (m) Lentiviral Particles: sc-140756-V.

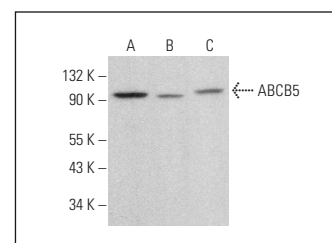
Molecular Weight of ABCB5: 89 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, F9 cell lysate: sc-2245 or B16-F0 cell lysate: sc-2298.

DATA



ABCB5 (A-7): sc-515910. Western blot analysis of ABCB5 expression in B16-F0 (A), F9 (B), AT-3 (C) and RPE-J (D) whole cell lysates.



ABCB5 (A-7): sc-515910. Western blot analysis of ABCB5 expression in Jurkat (A), Neuro-2A (B) and WEHI-231 (C) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.