SANTA CRUZ BIOTECHNOLOGY, INC.

ABCB5 (11A2): sc-517565

SANTA CRUZ BIOTECHNOLOGY

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 alpha and beta, exist due to alternative splicing events.

REFERENCES

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5. Chen, K.G., Szakács, G., Annereau, J.P., Rouzaud, F., Liang, X.J., Valencia, J.C., Nagineni, C.N., Hooks, J.J., Hearing, V.J. and Gottesman, M.M. 2005. Principal expression of two mRNA isoforms (ABCB 5α and ABCB 5β) of the ATP-binding cassette transporter gene ABCB 5 in melanoma cells and melanocytes. Pigment Cell Res. 18: 102-112.
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7. Hendig, D., Langmann, T., Kocken, S., Zarbock, R., Szliska, C., Schmitz, G., Kleesiek, K. and Götting, C. 2008. Gene expression profiling of ABC transporters in dermal fibroblasts of pseudoxanthoma elasticum patients identifies new candidates involved in PXE pathogenesis. Lab. Invest. 88: 1303-1315.
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CHROMOSOMAL LOCATION

Genetic locus: ABCB5 (human) mapping to 7p21.1.

SOURCE

ABCB5 (11A2) is a mouse monoclonal antibody raised against recombinant ABCB5 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ABCB5 (11A2) is recommended for detection of ABCB5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

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

Molecular Weight of ABCB5: 89 kDa.

SELECT PRODUCT CITATIONS

1. Zhang, H.L., Wang, P., Lu, M.Z., Zhang, S.D. and Zheng, L. 2019. C-Myc maintains the self-renewal and chemoresistance properties of colon cancer stem cells. Oncol. Lett. 17: 4487-4493.

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.