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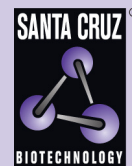
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Wip1 (h2): 293T Lysate: sc-115655

BACKGROUND

Several major serine/threonine protein phosphatases have been identified in eukaryotic cells. These include protein phosphatase families 1, 2A, 2B, 2C, X and Y (PP-1, PP-2A, PP-2B, PP-2C, PP-X and PP-Y). These enzymes can be distinguished by their action on phosphorylase kinase and their sensitivity to certain activators and inhibitors. Wip1 (wildtype p53-induced phosphatase or PPM1D), a protein identified in the p53 DNA response pathway, is a member of the PP-2C family. Wip1 is a serine/threonine protein phosphatase which selectively inactivates p38 MAPK and dephosphorylates the ATM/ATR targets, Chk1 and p53. Wip1 is ubiquitously expressed but is present at very high levels in testis. Deletion of Wip1 results in a reduction of T and B cell function and compromised cell division, rendering cells resistant to becoming cancerous and slowing tumor development.

REFERENCES

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8. Schito, M.L., et al. 2006. Wip1 phosphatase-deficient mice exhibit defective T cell maturation due to sustained p53 activation. *J. Immunol.* 176: 4818-4825.
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CHROMOSOMAL LOCATION

Genetic locus: PPM1D (human) mapping to 17q23.2.

PRODUCT

Wip1 (h2): 293T Lysate represents a lysate of human Wip1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Wip1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Wip1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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.