



SKRP1 (h3): 293T Lysate: sc-158963

BACKGROUND

Mitogen-activated protein (MAP) kinases are a large class of proteins involved in signal transduction pathways that are activated by a range of stimuli and mediate a number of physiological and pathological changes in the cell. Dual specificity phosphatases (DSPs) are a subclass of the protein tyrosine phosphatase (PTP) gene superfamily, which are selective for dephosphorylating critical phosphothreonine and phosphotyrosine residues within MAP kinases. DSP gene expression is induced by a host of growth factors and/or cellular stresses, thereby negatively regulating MAP kinase superfamily members including MAPK/ERK, SAPK/JNK and p38. The stress-activated protein kinase (SAPK) pathway-regulating phosphatase 1 (SKRP1) binds to MAP kinase MKK-7 to regulate JNK.

REFERENCES

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2. Sun, H. 1998. Functional studies of dual-specificity phosphatases. *Methods Mol. Biol.* 84: 307-318.
3. Camps, M., Nichols, A. and Arkinstall, S. 2000. Dual specificity phosphatases: a gene family for control of MAP kinase function. *FASEB J.* 14: 6-16.
4. Zama, T., Aoki, R., Kamimoto, T., Inoue, K., Ikeda, Y. and Hagiwara, M. 2002. A novel dual specificity phosphatase SKRP1 interacts with the MAPK kinase MKK7 and inactivates the JNK MAPK pathway. Implication for the precise regulation of the particular MAPK pathway. *J. Biol. Chem.* 277: 23909-23918.
5. Zama, T., Aoki, R., Kamimoto, T., Inoue, K., Ikeda, Y. and Hagiwara, M. 2002. Scaffold role of a mitogen-activated protein kinase phosphatase, SKRP1, for the JNK signaling pathway. *J. Biol. Chem.* 277: 23919-23926.

CHROMOSOMAL LOCATION

Genetic locus: DUSP19 (human) mapping to 2q32.1.

PRODUCT

SKRP1 (h3): 293T Lysate represents a lysate of human SKRP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

SKRP1 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive SKRP1 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.

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.

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.