

DUSP8 (h): 293T Lysate: sc-112178

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. DUSP8 inactivates SAPK/JNK and p38, is expressed predominantly in the adult brain, heart and skeletal muscle. It localizes in the cytoplasm, and is induced by nerve growth factor and Insulin. DUSP8 may play a role in pathophysiological mechanisms leading to development of alcohol dependence.

REFERENCES

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4. 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.
5. Hink, R.L., Hokanson, J.E., Shah, I., Long, J.C., Goldman, D. and Sikela, J.M. 2003. Investigation of DUSP8 and CALCA in alcohol dependence. *Addict. Biol.* 8: 305-312.

CHROMOSOMAL LOCATION

Genetic locus: DUSP8 (human) mapping to 11p15.5.

PRODUCT

DUSP8 (h): 293T Lysate represents a lysate of human DUSP8 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

DUSP8 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive DUSP8 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.