

JNK2 (N-18): sc-827



The Power to Question

BACKGROUND

c-Jun N-terminal kinases (JNKs) phosphorylate and augment transcriptional activity of c-Jun. JNKs originate from three genes that yield ten isoforms through alternative mRNA splicing, including JNK1 α 1, JNK1 β 1, JNK2 α 1, JNK2 β 1 and JNK3 α 1, which represent the p46 isoforms, and JNK1 α 2, JNK1 β 2, JNK2 α 2, JNK2 β 2 and JNK3 β 2, which represent the p54 isoforms. JNKs coordinate cell responses to stress and influence regulation of cell growth and transformation. The human JNK1 (PRKM8, SAPK1, MAPK8) gene maps to chromosome 5q35.3 and shares 83% amino acid identity with JNK2. JNK1 is necessary for normal activation and differentiation of CD4 helper T (TH) cells into TH1 and TH2 effector cells. Capsaicin activates JNK1 and p38 in Ras-transformed human breast epithelial cells. Nitrogen oxides (NO_x) upregulate JNK1 in addition to c-Fos, c-Jun and other signaling kinases, including MEKK1 and p38.

SOURCE

JNK2 (N-18) is available as either rabbit (sc-827) or goat (sc-827-G) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of JNK2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-827 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin conjugate for flow cytometry, sc-827 PE, 100 tests.

Available as agarose (sc-827 AC) conjugate for immunoprecipitation, 500 μ g / 0.25 ml agarose in 1 ml.

Available as Alexa Fluor[®] 405 (sc-827 AF405), Alexa Fluor[®] 488 (sc-827 AF488) or Alexa Fluor[®] 647 (sc-827 AF647) conjugates for flow cytometry or immunofluorescence; 100 μ g/2 ml.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

JNK2 (N-18) is recommended for detection of all JNK2 and, to a lesser extent, JNK1 and JNK3 p46 and p54 isoforms of mouse, rat, human, and to a lesser extent, monkey origin by Western Blotting (starting dilution 1:200, 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), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JNK2 (N-18) is also recommended for detection of all JNK2 and, to a lesser extent, JNK1 and JNK3 p46 and p54 isoforms in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of JNK3 p46 isoform: 46 kDa.

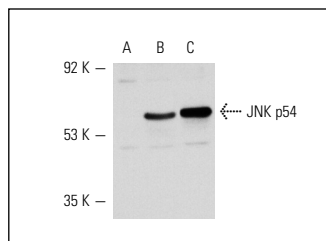
Molecular Weight of JNK3 p54 isoform: 54 kDa.

Positive Controls: COS + UV cell lysate: sc-24666, NIH/3T3 whole cell lysate: sc-2210 or K-562 whole cell lysate: sc-2203.

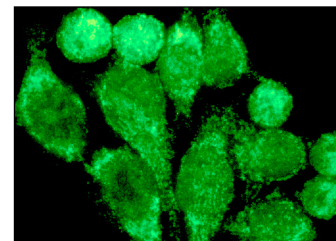
STORAGE

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

DATA



JNK2 (N-18): sc-827. Western blot analysis of JNK p54 expression in control (A), JNK2-transfected (B) and UV-irradiated (C) COS whole cell lysates.



JNK2 (N-18) AF488: sc-827 AF488. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Moriyama, M., et al. 1997. Bcl-6 is phosphorylated at multiple sites in its serine and proline clustered region by mitogen activated protein kinase (MAPK) in vivo. *Oncogene* 14: 2465-2474.
- Hernandez, M., et al. 1997. Thrombin produces phosphorylation of cytosolic phospholipase A₂ by a mitogen-activated protein kinase-independent mechanism in the human astrocytoma cell line 1321N1. *Biochem. J.* 328: 263-269.
- Daskalopoulos, E.P., et al. 2012. D2-dopaminergic receptor-linked pathways: critical regulators of CYP3A, CYP2C, and CYP2D. *Mol. Pharmacol.* 82: 668-678.
- Chen-Deutsch, X. and Studzinski, G.P. 2012. Dual role of hematopoietic progenitor kinase 1 (HPK1) as a positive regulator of 1 α ,25-dihydroxyvitamin D-induced differentiation and cell cycle arrest of AML cells and as a mediator of vitamin D resistance. *Cell Cycle* 11: 1364-1373.
- Wu, N., et al. 2012. The miR-17 family links p63 protein to MAPK signaling to promote the onset of human keratinocyte differentiation. *PLoS ONE* 7: e45761.
- An, J., et al. 2012. TAT-apoptosis repressor with caspase recruitment domain protein transduction rescues mice from fulminant liver failure. *Hepatology* 56: 715-726.

RESEARCH USE

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

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Try **JNK2 (A-7): sc-2711133**, our highly recommended monoclonal alternative to JNK2 (N-18).