

JNK2 (L-12): sc-46013

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 10q11.22 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.

CHROMOSOMAL LOCATION

Genetic locus: MAPK9 (human) mapping to 5q35.3; Mapk9 (mouse) mapping to 11 B1.2.

SOURCE

JNK2 (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-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-46013 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JNK2 (L-12) is recommended for detection of JNK2 p54 isoforms of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JNK2 (L-12) is also recommended for detection of JNK2 p54 isoforms in additional species, including canine and bovine.

Suitable for use as control antibody for JNK2 siRNA (h): sc-39101, JNK2 siRNA (m): sc-39102, JNK2 siRNA (r): sc-156090, JNK2 shRNA Plasmid (h): sc-39101-SH, JNK2 shRNA Plasmid (m): sc-39102-SH, JNK2 shRNA Plasmid (r): sc-156090-SH, JNK2 shRNA (h) Lentiviral Particles: sc-39101-V, JNK2 shRNA (m) Lentiviral Particles: sc-39102-V and JNK2 shRNA (r) Lentiviral Particles: sc-156090-V.

Molecular Weight of JNK2 p46 isoform: 46 kDa.

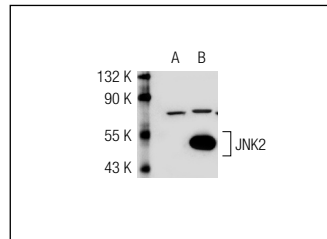
Molecular Weight of JNK2 p54 isoform: 54 kDa.

Positive Controls: COS + UV cell lysate: sc-24666, JNK2 (m): 293T Lysate: sc-125507 or K-562 whole cell lysate: sc-2203.

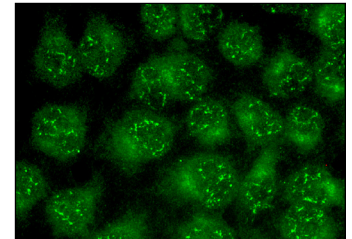
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



JNK2 (L-12): sc-46013. Western blot analysis of JNK2 expression in non-transfected: sc-117752 (A) and mouse JNK2 transfected: sc-125507 (B) 293T whole cell lysates.



JNK2 (L-12): sc-46013. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Andújar, I., et al. 2010. Shikonin reduces oedema induced by phorbol ester by interfering with κ C β degradation thus inhibiting translocation of NF κ B to the nucleus. *Br. J. Pharmacol.* 160: 376-388.
- Cao, Y., et al. 2010. Enhanced T cell-independent antibody responses in c-Jun N-terminal kinase 2 (JNK2)-deficient B cells following stimulation with CpG-1826 and anti-IgM. *Immunol. Lett.* 132: 38-44.

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 or our catalog for detailed protocols and support products.



Try **JNK2 (A-7): sc-271133**, our highly recommended monoclonal alternatives to JNK2 (L-12).