# JNK2 (D-12): sc-46011



#### **BACKGROUND**

c-Jun N-terminal kinases (JNKs) phosphorylate and augment transcriptional activity of c-Jun. JNKs originate from three genes that yield 10 isoforms through alternative mRNA splicing, including JNK1 $\alpha$ 1, JNK1 $\beta$ 1, JNK2 $\alpha$ 1, JNK2 $\beta$ 1 and JNK3 $\alpha$ 1, which represent the p46 isoforms, and JNK1 $\alpha$ 2, JNK1 $\beta$ 2, JNK2 $\alpha$ 2, JNK2 $\beta$ 2 and JNK3 $\beta$ 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<sub>x</sub>) 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 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JNK2 of human origin.

## **PRODUCT**

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46011 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **RESEARCH USE**

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

## **APPLICATIONS**

JNK2 (D-12) is recommended for detection of all JNK2 p46 and p54 isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (D-12) is also recommended for detection of all JNK2 p46 and p54 isoforms in additional species, including porcine.

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

Molecular Weight of JNK2 p46 isoform: 46 kDa. Molecular Weight of JNK2 p54 isoform: 54 kDa.

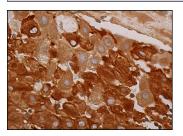
Positive Controls: K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell

lysate: sc-2210.

#### **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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

#### **DATA**



JNK2 (D-12): sc-46011. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic or cytoplasmic

#### **STORAGE**

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

## **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 aternative to JNK2 (D-12).

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