p-c-Jun (C-J 4C4/1): sc-53182



The Power to Question

BACKGROUND

Genes belonging to the Jun and Fos oncogene families encode nuclear proteins that are found to be associated with a number of transcriptional complexes. The c-Jun protein is a major component of the transcription factor AP-1, originally shown to mediate phorbol ester tumor promoter (TPA)-induced expression of responsive genes through the TPA-response element (TRE). The Jun proteins form homo- and heterodimers which bind the TRE, while Fos proteins are active only as heterodimers with any of the Jun proteins. Fos/Jun heterodimers have a much higher affinity for the TRE than Jun homodimers. Ha-Ras augments c-Jun activity and stimulates phosphorylation of its activation domain. An inhibitor of Fos/Jun function, termed IP-1, associates with Fos and Jun and is inactivated upon phosphorylation induced by the cAMP-dependent protein kinase A (PKA).

CHROMOSOMAL LOCATION

Genetic locus: JUN (human) mapping to 1p32.1; Jun (mouse) mapping to 4 C5.

SOURCE

p-c-Jun (C-J 4C4/1) is a mouse monoclonal antibody raised against a short amino acid sequence containing Thr 91 and Thr 93 dually phosphorylated c-Jun of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p-c-Jun (C-J 4C4/1) is available conjugated to agarose (sc-53182 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53182 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53182 PE), fluorescein (sc-53182 FITC), Alexa Fluor® 488 (sc-53182 AF488), Alexa Fluor® 546 (sc-53182 AF546), Alexa Fluor® 594 (sc-53182 AF594) or Alexa Fluor® 647 (sc-53182 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53182 AF680) or Alexa Fluor® 790 (sc-53182 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

p-c-Jun (C-J 4C4/1) is recommended for detection of Thr 91 and Thr 93 phosphrylated c-Jun of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for c-Jun siRNA (h): sc-29223, c-Jun siRNA (m): sc-29224, c-Jun siRNA (r): sc-156028, c-Jun shRNA Plasmid (h): sc-29223-SH, c-Jun shRNA Plasmid (m): sc-29224-SH, c-Jun shRNA Plasmid (r): sc-156028-SH, c-Jun shRNA (h) Lentiviral Particles: sc-29223-V, c-Jun shRNA (m) Lentiviral Particles: sc-29224-V and c-Jun shRNA (r) Lentiviral Particles: sc-156028-V.

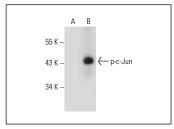
Molecular Weight of p-c-Jun: 39 kDa.

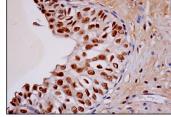
Positive Controls: c-Jun (m): 293T Lysate: sc-125069, A-431 nuclear extract: sc-2122 or NIH/3T3 whole cell lysate: sc-2210.

STORAGE

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

DATA





p-c-Jun (C-J 4C4/1): sc-53182. Western blot analysis of c-Jun phosphorylation in non-transfected: sc-117752 (**A**) and mouse c-Jun transfected: sc-125069 (**B**) 293T whole cell Ivsates

p-c-Jun (C-J 4C4/1): sc-53182. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing nuclear staining of userbalia calls.

SELECT PRODUCT CITATIONS

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- 2. Li, C., et al. 2016. Heme Oxygenase 1 induction protects myocardiac cells against hypoxia/reoxygenation-induced apoptosis: the role of JNK/c-Jun/caspase-3 inhibition and Akt signaling enhancement. Herz 41: 715-724.
- 3. Jia, J., et al. 2018. MiR-125b inhibits LPS-induced inflammatory injury via targeting MIP-1 α in chondrogenic cell ATDC5. Cell. Physiol. Biochem. 45: 2305-2316.
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- Sanna, M.D., et al. 2020. The isoform-specific functions of the c-Jun N-terminal kinase (JNK) in a mouse model of antiretroviral-induced painful peripheral neuropathy. Eur. J. Pharmacol. 880: 173161.

RESEARCH USE

For research use only, not for use in diagnostic procedures

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