

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

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 µg IgG₁ 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 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53182 HRP), 200 µg/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 µg/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 µg/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 phosphorylated 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.

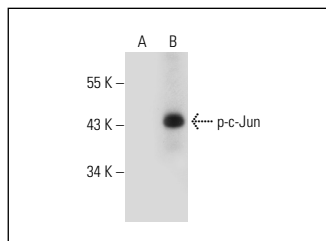
Molecular Weight of p-c-Jun: 39 kDa.

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

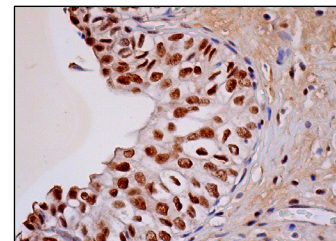
STORAGE

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 lysates.



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

SELECT PRODUCT CITATIONS

- Zhang, J., et al. 2010. Effects of transfection of ICAP-1 α and its mutants on adhesion and migration of 2H-11 cells. *J. Huazhong Univ. Sci. Technol. Med. Sci.* 30: 569-574.
- Li, C., et al. 2016. Heme Oxygenase 1 induction protects myocardial cells against hypoxia/reoxygenation-induced apoptosis: the role of JNK/c-Jun/caspase-3 inhibition and Akt signaling enhancement. *Herz* 41: 715-724.
- 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.
- Liu, F., et al. 2018. The role of NF κ B-mediated JNK pathway in cognitive impairment in a rat model of sleep apnea. *J. Thorac. Dis.* 10: 6921-6931.
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- Huang, Y., et al. 2019. Baicalin relieves inflammation stimulated by lipopolysaccharide via upregulating TUG1 in liver cells. *J. Physiol. Biochem.* 75: 463-473.
- Xi, Z., et al. 2020. Gastrodin relieves inflammation injury induced by lipopolysaccharides in MRC-5 cells by up-regulation of miR-103. *J. Cell. Mol. Med.* 24: 1451-1459.
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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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