

# p-c-Jun (Ser 63)-R: sc-7980-R

## 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, but the 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 deactivated 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 (Ser 63)-R is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 63 phosphorylated c-Jun of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-7980 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

p-c-Jun (Ser 63)-R is recommended for detection of Ser 63 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)], 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).

p-c-Jun (Ser 63)-R is also recommended for detection of correspondingly phosphorylated Ser on c-Jun in additional species, including canine and bovine.

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

p-c-Jun (Ser 63) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

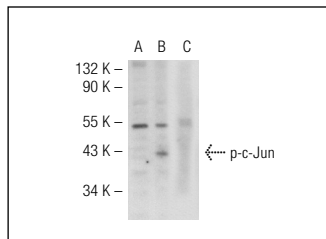
Molecular Weight of p-c-Jun: 39 kDa.

Positive Controls: GP-39 (m): 293T Lysate: sc-120569, A-431 + PMA nuclear extract: sc-2123 or NIH/3T3 whole cell lysate: sc-2210.

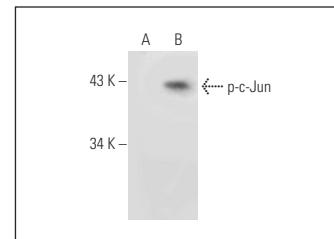
## STORAGE

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 (Ser 63)-R: sc-7980-R. Western blot analysis of c-Jun phosphorylation in non-transfected: sc-117752 (A), untreated mouse c-Jun transfected: sc-125069 (B) and lambda protein phosphatase treated mouse c-Jun transfected: sc-125069 (C) 293T whole cell lysates.



p-c-Jun (Ser 63)-R: sc-7980-R. 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.

## SELECT PRODUCT CITATIONS

1. Turi, J.L., et al. 2002. Oxidative stress activates anion exchange protein 2 and AP-1 in airway epithelial cells. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 283: L791-L798.
2. Cazanave, S.C., et al. 2009. JNK1-dependent PUMA expression contributes to hepatocyte lipooptosis. *J. Biol. Chem.* 284: 26591-26602.
3. Shao, C., et al. 2010. Regulation of CCAAT/enhancer-binding protein homologous protein (CHOP) expression by interleukin-1  $\beta$  in pancreatic  $\beta$  cells. *J. Biol. Chem.* 285: 19710-19719.
4. Cazanave, S.C., et al. 2010. CHOP and AP-1 cooperatively mediate PUMA expression during lipooptosis. *Am. J. Physiol. Gastrointest. Liver Physiol.* 299: G236-G243.
5. Yaniv, S.P., et al. 2010. Dexamethasone enhances the norepinephrine-induced ERK/MAPK intracellular pathway possibly via dysregulation of the  $\alpha$ 2-adrenergic receptor: implications for antidepressant drug mechanism of action. *Eur. J. Cell Biol.* 89: 712-722.
6. Wen, H., et al. 2010. Plexin-A4-semaphorin 3A signaling is required for Toll-like receptor- and sepsis-induced cytokine storm. *J. Exp. Med.* 207: 2943-2957.

## RESEARCH USE

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

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Try **p-c-Jun (KM-1): sc-822**, our highly recommended monoclonal alternative to p-c-Jun (Ser 63). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **p-c-Jun (KM-1): sc-822**.