SANTA CRUZ BIOTECHNOLOGY, INC.

c-Jun (N): sc-45

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Genes belonging to the Jun and Fos oncogene families encode nuclear proteins that are 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

c-Jun (N) is available as either rabbit (sc-45) or goat (sc-45-G) affinity purified polyclonal antibody raised against a peptide mapping within the N-terminus of c-Jun of mouse origin.

PRODUCT

Each vial contains either 100 µg (sc-45) or 200 µg (sc-45-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-45 X, 200 µg/0.1 ml.

c-Jun (N) is available conjugated phycoerythrin (sc-45 PE, 200 µg/ml), for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-45 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

c-Jun (N) is recommended for detection of c-Jun of mouse, rat, human, chicken and *Xenopus laevis* 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).

c-Jun (N) is also recommended for detection of c-Jun in additional species, including canine, bovine, porcine and avian.

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

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

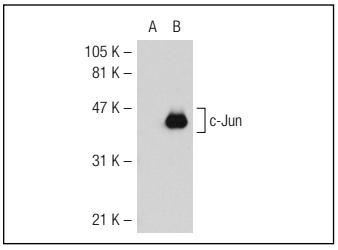
Molecular Weight of c-Jun: 39 kDa.

Positive Controls: c-Jun (h): 293 Lysate: sc-110759, c-Jun (m): 293T Lysate: sc-125069 or C6 whole cell lysate: sc-364373.

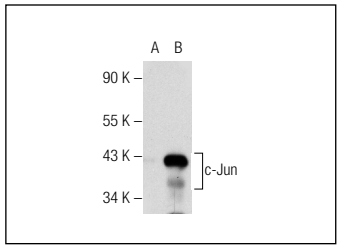
STORAGE

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

DATA



c-Jun (N): sc-45. Western blot analysis of c-Jun expression in non-transfected: sc-110760 (**A**) and human c-Jun transfected: sc-110759 (**B**) 293 whole cell lysates.



c-Jun (N): sc-45. Western blot analysis of c-Jun expression in non-transfected: sc-117752 (**A**) and mouse c-Jun transfected: sc-125069 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ferrer, I., et al. 1999. Role of caspases in ionizing radiation-induced apoptosis in the developing cerebellum. J. Neurobiol. 41: 549-558.
2. Lan, H.C., et al. 2012. Death-associated protein 6 (Daxx) mediates cAMP-dependent stimulation of Cyp11a1 (P450scc) transcription. J. Biol. Chem. 287: 5910-5916.
3. Manea, A., et al. 2012. Positive regulation of NADPH oxidase 5 by proinflammatory-related mechanisms in human aortic smooth muscle cells. Free Radic. Biol. Med. 52: 1497-1507.
4. Colecchia, D., et al. 2012. MAPK15/ERK8 stimulates autophagy by interacting with LC3 and GABARAP proteins. Autophagy 8: 1724-1740.
5. Gonzalez-Rodriguez, A., et al. 2012. Essential role of protein tyrosine phosphatase 1B in obesity-induced inflammation and peripheral Insulin resistance during aging. Aging Cell 11: 284-296.
6. Lupino, E., et al. 2012. IκB kinase β is required for activation of NFκB and AP-1 in CD3/CD28-stimulated primary CD4+ T cells. J. Immunol. 188: 2545-2555.
7. Price, V., et al. 2013. Conditional deletion of histone deacetylase-4 in the central nervous system has no major effect on brain architecture or neuronal viability. J. Neurosci. Res. 91: 407-415.

RESEARCH USE

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