SANTA CRUZ BIOTECHNOLOGY, INC.

c-Jun (D): sc-44

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).

SOURCE

c-Jun (D) is available as either rabbit (sc-44) or goat (sc-44-G) affinity purified polyclonal antibody raised against a peptide mapping a highly conserved DNA binding domain of c-Jun of mouse origin.

PRODUCT

Each vial contains either 100 µg (sc-44) or 200 µg (sc-44-G) µg 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-44 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-44 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

c-Jun (D) is recommended for detection of c-Jun, Jun B, and Jun D p39 proteins 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 (D) is also recommended for detection of c-Jun, Jun B, and Jun D p39 proteins in additional species, including canine, bovine, porcine and avian.

c-Jun (D) 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 (m3): 293T Lysate: sc-125071 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.

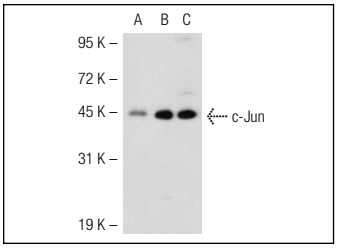
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

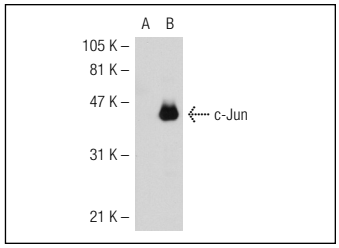
RESEARCH USE

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

DATA



c-Jun (D): sc-44. Western blot analysis of c-Jun expression in non-transfected 293T: sc-117752 (**A**), mouse c-Jun transfected 293T: sc-125071 (**B**) and NIH/3T3 (**C**) whole cell lysates.



c-Jun (D): sc-44. 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.

SELECT PRODUCT CITATIONS

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3. Kaddatz, K., et al. 2010. Transcriptional profiling identifies functional interactions of TGF β and PPAR β/δ signaling: synergistic induction of ANGPTL4 transcription. J. Biol. Chem. 285: 29469-29479.
4. Humphreys, E.H., et al. 2010. Primary and malignant cholangiocytes undergo CD40 mediated Fas dependent apoptosis, but are insensitive to direct activation with exogenous Fas ligand. PLoS ONE 5: e14037.
5. Sirianni, R., et al. 2010. The AP-1 family member Fos blocks transcriptional activity of the nuclear receptor steroidogenic factor 1. J. Cell Sci. 123: 3956-3965.
6. Lee, Y.C., et al. 2010. Inhibitory effects of andrographolide on migration and invasion in human non-small cell lung cancer A549 cells via down-regulation of PI3K/Akt signaling pathway. Eur. J. Pharmacol. 632: 23-32.
7. Wang, S., et al. 2011. Transcriptional regulation of bone sialoprotein gene by interleukin-11. Gene 476: 46-55.
8. Padmanabhan, R.A., et al. 2011. CrkL is a co-activator of estrogen receptor α that enhances tumorigenic potential in cancer. Mol. Endocrinol. 25: 1499-1512.