SANTA CRUZ BIOTECHNOLOGY, INC.

# Jun B (N-17): sc-46

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The c-Jun proto-oncogene was first identified as the cellular homolog of the avian sarcoma virus v-Jun oncogene. The c-Jun protein along with c-Fos is a component of the AP-1 transcriptional complex. c-Jun can form either Jun/Jun homodimers or Jun/Fos heterodimers via the leucine repeats in both proteins. Homo- and heterodimers bind to the TGACTCA consensus sequence present in numerous promoters and initially identified as the phorbol ester tumor promoter response element (TRE). Two additional genes, Jun B and Jun D have been shown to be almost identical to c-Jun in their C-terminal regions, which are involved in dimerization and DNA binding, whereas their N-terminal domains, which are involved in transcriptional activation, diverge. All three form heterodimers among themselves and with c-Fos and other members of the Fos gene family.

## CHROMOSOMAL LOCATION

Genetic locus: JUNB (human) mapping to 19p13.2; Junb (mouse) mapping to 8 C3.

## SOURCE

Jun B (N-17) is available as either rabbit (sc-46) or goat (sc-46-G) polyclonal affinity purified antibody raised against a peptide mapping within the N-terminus of Jun B of mouse 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-46 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-46 X, 200 µg/0.1 ml.

## APPLICATIONS

Jun B (N-17) is recommended for detection of Jun B 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Jun B siRNA (h): sc-35726, Jun B siRNA (m): sc-35727, Jun B shRNA Plasmid (h): sc-35726-SH, Jun B shRNA Plasmid (m): sc-35727-SH, Jun B shRNA (h) Lentiviral Particles: sc-35726-V and Jun B shRNA (m) Lentiviral Particles: sc-35727-V.

Jun B (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

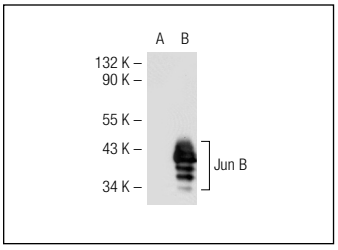
Molecular Weight of Jun B: 39 kDa.

Positive Controls: Jun B (m): 293T Lysate: sc-121169, HeLa whole cell lysate: sc-2200 or NIH/3T3 nuclear extract: sc-2138.

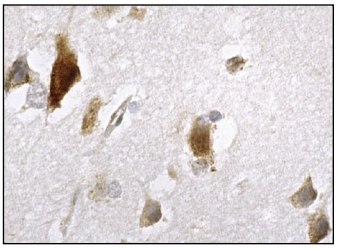
## STORAGE

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

## DATA




Jun B (N-17): sc-46. Western blot analysis of Jun B expression in non-transfected: sc-117752 (**A**) and mouse Jun B transfected: sc-121169 (**B**) 293T whole cell lysates.



Jun B (N-17): sc-46. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing nuclear and cytoplasmic staining of neuronal and glial cells.

## SELECT PRODUCT CITATIONS


1. Zachos, G., et al. 1999. Herpes simplex virus type 1 infection stimulates p38/c-Jun N-terminal mitogen-activated protein kinase pathways and activates transcription factor AP-1. J. Biol. Chem. 274: 5097-5103.
2. Yogev, O., et al. 2010. Jun proteins are starvation-regulated inhibitors of autophagy. Cancer Res. 70: 2318-2327.
3. Lluis, J.M., et al. 2010. TAK1 is required for survival of mouse fibroblasts treated with TRAIL, and does so by NFκB dependent induction of cFLIPL. PLoS ONE 5: e8620.
4. Adhikary, G., et al. 2010. PKC-δ and -η, MEKK-1, MEK-6, MEK-3, and p38-δ are essential mediators of the response of normal human epidermal keratinocytes to differentiating agents. J. Invest. Dermatol. 130: 2017-2030.
5. Chen, D., et al. 2011. JunD and JunB integrate prostaglandin E2 activation of breast cancer-associated proximal aromatase promoters. Mol. Endocrinol. 25: 767-775.
6. Landreville, S., et al. 2011. Suppression of α5 gene expression is closely related to the tumorigenic properties of uveal melanoma cell lines. Pigment Cell Melanoma Res. 24: 643-655.
7. Leone, V., et al. 2011. A TSH-CREB1-microRNA loop is required for thyroid cell growth. Mol. Endocrinol. 25: 1819-1830.


## RESEARCH USE

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