SANTA CRUZ BIOTECHNOLOGY, INC.

Jun B (C-11): sc-8051

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.

REFERENCES

1. Maki, Y., et al. 1987. Avian sarcoma virus 17 carries the Jun oncogene. Proc. Natl. Acad. Sci. USA 84: 2848-2852.
2. Nishimura, T., et al. 1988. The avian cellular homolog of the oncogene Jun. Oncogene 3: 659-663.

CHROMOSOMAL LOCATION

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

SOURCE

Jun B (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 200-222 near the C-terminus of Jun B of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain 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-8051 X, 200 µg/0.1 ml.

Jun B (C-11) is available conjugated to agarose (sc-8051 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8051 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8051 PE), fluorescein (sc-8051 FITC), Alexa Fluor® 488 (sc-8051 AF488), Alexa Fluor® 546 (sc-8051 AF546), Alexa Fluor® 594 (sc-8051 AF594) or Alexa Fluor® 647 (sc-8051 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8051 AF680) or Alexa Fluor® 790 (sc-8051 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Jun B (C-11) is available conjugated to TRITC (sc-8051 TRITC, 200 µg/ml), for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-8051 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

Jun B (C-11) 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).

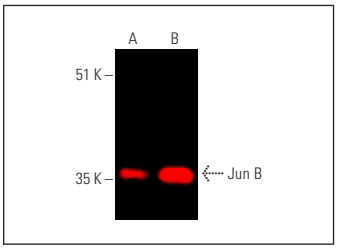
Suitable for use as control antibody for Jun B siRNA (h): sc-35726, Jun B siRNA (m): sc-35727, Jun B shRNA Plasmid (h): sc-35726-SH, Jun B shRNA Plasmid (m): sc-35727-SH, Jun B shRNA (h) Lentiviral Particles: sc-35726-V and Jun B shRNA (m) Lentiviral Particles: sc-35727-V.

Jun B (C-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

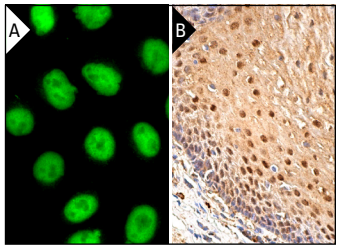
Molecular Weight of Jun B: 39 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, human bladder extract: sc-363751 or human esophagus extract: sc-363760.

DATA



Jun B (C-11): sc-8051. Near-infrared western blot analysis of Jun B expression in human bladder (**A**) and human esophagus (**B**) tissue extracts. Detection reagent used: m-IgGκ BP-CFL 790: sc-516181.



Jun B (C-11) Alexa Fluor® 488: sc-8051 AF488. Direct immunofluorescence staining of formalin-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear and cytoplasmic staining of squamous epithelial cells (**B**).

SELECT PRODUCT CITATIONS

1. Chuang, S.S., et al. 2001. 2B4 (CD244)-mediated activation of cytotoxicity and IFN-γ release in human NK cells involves distinct pathways. J. Immunol. 167: 6210-6216.
2. Wang, Y., et al. 2024. Tgfb1 deficiency impairs the self-renewal capacity of murine hematopoietic stem/progenitor cells in vivo. Biochem. Biophys. Res. Commun. 703: 149686.
3. Hartmann, L., et al. 2025. Transcriptional regulators ensuring specific gene expression and decision-making at high TGFβ doses. Life Sci. Alliance 8: e202402859.

RESEARCH USE

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