

Jun B (C-11): sc-8051



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

- Maki, Y., et al. 1987. Avian sarcoma virus 17 carries the Jun oncogene. Proc. Natl. Acad. Sci. USA 84: 2848-2852.
- 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 IgG₁ 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).

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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).

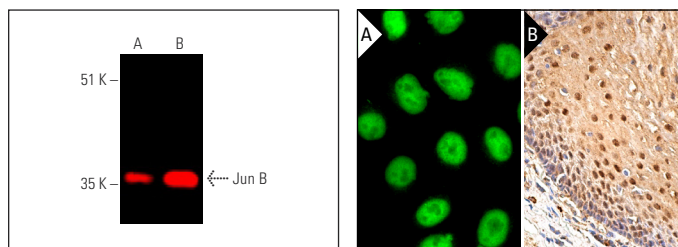
Suitable for use as control antibody for Jun B siRNA (h): sc-35726, Jun B siRNA (m): sc-35727, Jun B shRNA Plasmid (h): sc-35726-SH, Jun B shRNA Plasmid (m): sc-35727-SH, Jun B shRNA (h) Lentiviral Particles: sc-35726-V and Jun B shRNA (m) Lentiviral Particles: sc-35727-V.

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

- 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.
- Zhang, X., et al. 2020. Promotion of cellular senescence by THG-1/TSC22D4 knockout through activation of Jun B. Biochem. Biophys. Res. Commun. 522: 897-902.
- Chen, T.Y., et al. 2021. Identification of a distal RXFP1 gene enhancer with differential activity in fibrotic lung fibroblasts involving AP-1. PLoS ONE 16: e0254466.

RESEARCH USE

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