## SANTA CRUZ BIOTECHNOLOGY, INC.

# Fos B (C-11): sc-8013



#### BACKGROUND

The v-Fos oncogene was initially identified as the transforming gene of two independent murine osteosarcoma virus isolates and an avian nephroblastoma virus. The cellular homolog, c-Fos, encodes a nuclear phosphoprotein that is rapidly and transiently induced by a variety of agents and functions as a transcriptional regulator for several genes. In contrast to c-Jun proteins, which form homo- and heterodimers which bind to specific DNA TPA response elements (TREs), c-Fos proteins are only active as heterodimers with members of the Jun gene family. Murine Fos B encodes a nuclear protein of 338 amino acids which has 70% homology with c-Fos, exhibits similar kinetics of expression as c-Fos and forms heterodimers with both c-Jun and Jun B, which bind to TRE DNA response elements. Functional homologs of c-Fos and Fos B include Fra-1 and Fra-2 genes.

#### **CHROMOSOMAL LOCATION**

Genetic locus: FOSB (human) mapping to 19q13.32; Fosb (mouse) mapping to 7 A3.

### SOURCE

Fos B (C-11) is a mouse monoclonal antibody raised against amino acids 75-150 mapping at the N-terminus of Fos B of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgM 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-8013 X, 200  $\mu$ g/0.1 ml.

Fos B (C-11) is available conjugated to agarose (sc-8013 AC), 500  $\mu g/0.25$  ml agarose in 1 ml, for IP.

#### **APPLICATIONS**

Fos B (C-11) is recommended for detection of Fos B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 Fos B siRNA (h): sc-35403, Fos B siRNA (m): sc-35404, Fos B shRNA Plasmid (h): sc-35403-SH, Fos B shRNA Plasmid (m): sc-35404-SH, Fos B shRNA (h) Lentiviral Particles: sc-35403-V and Fos B shRNA (m) Lentiviral Particles: sc-35404-V.

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

Molecular Weight of Fos B: 45 kDa.

#### **STORAGE**

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

### **RESEARCH USE**

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

#### DATA





of formalin-fixed, paraffin-embedded human color

carcinoma tissue showing nuclear localization.

Fos B (C-11): sc-8013. Western blot analysis of human recombinant Fos B fusion protein.

**SELECT PRODUCT CITATIONS** 

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- 3. Du, L., et al. 2006. Differentiation-specific factors modulate epidermal CYP1-4 gene expression in human skin in response to retinoic acid and classic aryl hydrocarbon receptor ligands. J. Pharmacol. Exp. Ther. 319: 1162-1171.
- Li, W., et al. 2007. MG-132 sensitizes TRAIL-resistant prostate cancer cells by activating c-Fos/c-Jun heterodimers and repressing c-FLIP<sub>L</sub>. Cancer Res. 67: 2247-2255.
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- Tzabazis, A., et al. 2016. Oxytocin receptor: expression in the trigeminal nociceptive system and potential role in the treatment of headache disorders. Cephalalgia 36: 943-950.
- Chamcheu, J.C., et al. 2019. Fisetin, a 3,7,3',4'-tetrahydroxyflavone inhibits the PI3K/Akt/mTOR and MAPK pathways and ameliorates psoriasis pathology in 2D and 3D organotypic human inflammatory skin models. Cells 8: 1089.
- Puri, R.V., et al. 2019. Notch4 activation aggravates NFκB mediated inflammation in HIV-1 associated nephropathy. Dis. Model. Mech. 12: dmm040642.



See Fos B (F-7): sc-398595 for Fos B antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor<sup>®</sup> 488, 546, 594, 647, 680 and 790.