# Fos B (H-75): sc-7203



The Power to Overtin

#### **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 (H-75) is a rabbit polyclonal antibody raised against amino acids 75-150 of Fos B of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  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-7203 X, 200  $\mu g/0.1$  ml.

## **APPLICATIONS**

Fos B (H-75) 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).

Fos B (H-75) is also recommended for detection of Fos B in additional species, including canine.

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 (H-75) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Fos B: 45 kDa.

Positive Controls: Fos B (h): 293T Lysate: sc-112170 or rat brain extract: sc-2392.

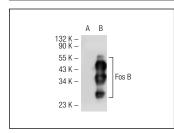
# **RESEARCH USE**

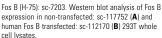
For research use only, not for use in diagnostic procedures.

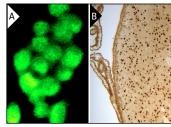
#### **STORAGE**

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

## **DATA**







Fos B (H-75): sc-7203. Immunofluorescence staining of methanol-fixed I-11.15 cells showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded, pimozide-treated rat brain tissue showing nuclear staining of the ventral lateral striatum. Image kindly provided by Regina Vontell, Adrienne Betz and John Salamone, University of Connecticut (B).

#### **SELECT PRODUCT CITATIONS**

- 1. Lai, C.F., et al. 2002. Signal transductions induced by bone morphogenetic protein-2 and transforming growth factor  $\beta$  in normal human osteoblastic cells. J. Biol. Chem. 277: 15514-15522.
- 2. Bavendiek, U., et al. 2002. Induction of tissue factor expression in human endothelial cells by CD40 ligand is mediated via activator protein 1, nuclear factor  $\kappa$  B, and Eqr-1. J. Biol. Chem. 277: 25032-25039.
- Bidder, M., et al. 2002. Osteopontin transcription in aortic vascular smooth muscle cells is controlled by glucose-regulated upstream stimulatory factor and activator protein-1 activities. J. Biol. Chem. 277: 44485-44496.
- 4. Zhang, D., et al. 2002. The dopamine D1 receptor is a critical mediator for cocaine-induced gene expression. J. Neurochem. 82: 1453-1464.
- Ruud, J., et al. 2007. Identification of rat brainstem neuronal structures activated during cancer-induced anorexia. J. Comp. Neurol. 504: 275-286.
- 6. Gingras, M.E., et al. 2009. Differential binding of the transcription factors Sp1, AP-1, and NFI to the promoter of the human  $\alpha 5$  integrin gene dictates its transcriptional activity. Invest. Ophthalmol. Vis. Sci. 50: 57-67.
- 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.



Try Fos B (F-7): sc-398595 or Fos B (C-6): sc-515210, our highly recommended monoclonal alternatives to Fos B (H-75). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see Fos B (F-7): sc-398595.