

Fos B (102): sc-48

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 (102) is available as either rabbit (sc-48) or goat (sc-48-G) polyclonal affinity purified antibody raised against a peptide mapping within an internal region of Fos B of mouse origin.

PRODUCT

Each vial contains either 100 µg (sc-48) or 200 µg (sc-48-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-48 X, 200 µg/0.1 ml.

Fos B (102) is available conjugated either fluorescein (sc-48 FITC, 200 µg/ml), Alexa Fluor[®] 488 (sc-48 AF488, 200 µg/ml) or Alexa Fluor[®] 647 (sc-48 AF647, 200 µg/ml), for IF, IHC(P) and FCM.

In addition, Fos B (102) is available conjugated to either TRITC (sc-48 TRITC, 200 µg/ml) or Alexa Fluor[®] 405 (sc-48 AF405), 100 µg/2 ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-48 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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APPLICATIONS

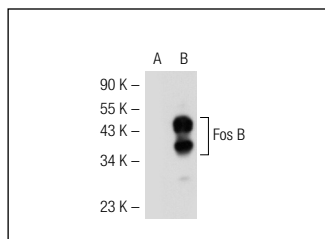
Fos B (102) is recommended for detection of Fos B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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 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.

Molecular Weight of Fos B: 45 kDa.

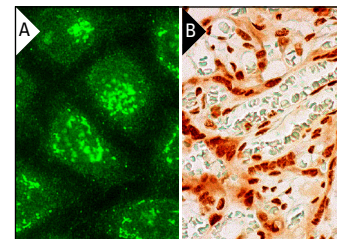
STORAGE

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

DATA



Fos B (102): sc-48. Western blot analysis of Fos B expression in non-transfected: sc-117752 (A) and human Fos B transfected: sc-112170 (B) 293T whole cell lysates.



Fos B (102)-G: sc-48-G. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear staining of trophoblastic cells (B).

SELECT PRODUCT CITATIONS

1. Suzukawa, K., et al. 2002. AP-1 transrepressing retinoic acid does not deplete coactivators or AP-1 monomers but may target specific Jun or Fos containing dimers. *Oncogene* 21: 2181-2190.
2. Ghosh, S.K., et al. 2002. ATF-1 mediates protease-activated receptor-1 but not receptor tyrosine kinase-induced DNA synthesis in vascular smooth muscle cells. *J. Biol. Chem.* 277: 21325.
3. Kuo, T.B., et al. 2011. Reactive oxygen species are the cause of the enhanced cardiorespiratory response induced by intermittent hypoxia in conscious rats. *Respir. Physiol. Neurobiol.* 175: 70-79.
4. Tomicic, M.T., et al. 2011. Delayed c-Fos activation in human cells triggers XPF induction and an adaptive response to UVC-induced DNA damage and cytotoxicity. *Cell. Mol. Life Sci.* 68: 1785-1798.
5. Sterrenburg, L., et al. 2011. Acute ether stress differentially affects corticotropin-releasing factor and urocortin 1 in the Brattleboro rat. *Brain Res.* 1398: 21-29.
6. Rouwette, T., et al. 2012. Experimental neuropathy increases limbic forebrain CRF. *Eur. J. Pain* 16: 61-71.
7. García-Pérez, D., et al. 2012. Glucocorticoids regulation of FosB/δFosB expression induced by chronic opiate exposure in the brain stress system. *PLoS ONE* 7: e50264.

RESEARCH USE

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



Try **Fos B (F-7): sc-398595** or **Fos B (C-6): sc-515210**, our highly recommended monoclonal alternatives to Fos B (102). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Fos B (F-7): sc-398595**.