

Fos B (C-12): sc-48868

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 that 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.

REFERENCES

1. Finkel, M.P., Biskis, B.O. and Jinkins, P.B. 1966. Virus induction of osteosarcomas in mice. *Science* 151: 698-701.
2. Curran, T. and Verma, I.M. 1984. FBR murine osteosarcoma virus. I. Molecular analysis and characterization of a 75 kDa Gag-Fos fusion product. *Virology* 135: 218-228.
3. Sambucetti, L.C. and Curran, T. 1987. The Fos protein complex is associated with DNA in isolated nuclei and binds to DNA cellulose. *Science* 234: 1417-1419.
4. Nishizawa, M., Goto, N. and Kawai, S. 1987. An avian transforming retrovirus isolated from a nephroblastoma that carries the Fos gene as the oncogene. *J. Virol.* 61: 3733-3740.
5. Renz, M., Verrier, B., Kurz, C. and Müller, R. 1987. Chromatin association and DNA binding properties of the c-Fos proto-oncogene product. *Nucleic Acids Res.* 15: 277-292.

CHROMOSOMAL LOCATION

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

SOURCE

Fos B (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Fos B of human origin.

PRODUCT

Each vial contains 200 µg 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-48868 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-48868 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Fos B (C-12) 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), 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 (C-12) is also recommended for detection of Fos B in additional species, including equine, canine and bovine.

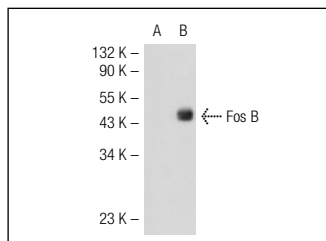
Suitable for use as control antibody for Fos B siRNA (h): sc-35403, Fos B siRNA (m): sc-35404, Fos B shRNA Plasmid (h): sc-35403-SH, Fos B shRNA Plasmid (m): sc-35404-SH, Fos B shRNA (h) Lentiviral Particles: sc-35403-V and Fos B shRNA (m) Lentiviral Particles: sc-35404-V.

Fos B (C-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

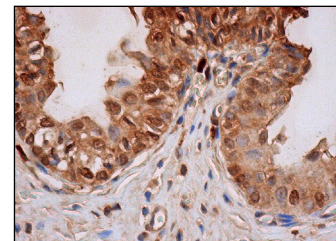
Molecular Weight of Fos B: 45 kDa.

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

DATA



Fos B (C-12): sc-48868. 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 (C-12): sc-48868. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing nuclear and cytoplasmic staining of urothelial cells.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **Fos B (F-7): sc-398595** or **Fos B (C-6): sc-515210**, our highly recommended monoclonal alternatives to Fos B (C-12). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Fos B (F-7): sc-398595**.