

Fos B (h): 293T Lysate: sc-112170

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., et al. 1966. Virus induction of osteosarcomas in mice. *Science* 151: 698-701.
2. Curran, T., et al. 1984. FBR murine osteosarcoma virus. *Virology* 135: 218-228.
3. Sambucetti, L.C., et al. 1986. The fos protein complex is associated with DNA in isolated nuclei and binds to DNA cellulose. *Science* 234: 1417-1419.
4. Renz, M., et al. 1987. Chromatin association and DNA-binding properties of the c-Fos protooncogene product. *Nucleic Acids Res.* 15: 277-292.
5. Nishizawa, M., et al. 1987. An avian transforming retrovirus isolated from a nephroblastoma that carries the Fos gene as the oncogene. *J. Virol.* 61: 3733-3740.
6. Zerial, M., et al. 1989. The product of a novel growth factor activated gene, Fos B, interacts with Jun proteins enhancing their DNA binding activity. *EMBO J.* 8: 805-813.
7. Nishina, H., et al. 1990. Isolation and characterization of Fra-2, an additional member of the Fos gene family. *Proc. Natl. Acad. Sci. USA* 87: 3619-3623.
8. Castellazzi, M., et al. 1991. Overexpression of c-Jun, Jun B, or Jun D affects cell growth differently. *Proc. Natl. Acad. Sci. USA* 88: 8890-8894.
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CHROMOSOMAL LOCATION

Genetic locus: FOSB (human) mapping to 19q13.32.

PRODUCT

Fos B (h): 293T Lysate represents a lysate of human Fos B transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Fos B (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Fos B antibodies. Recommended use: 10-20 µl per lane.

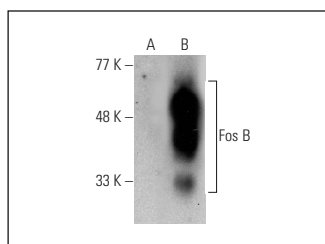
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

c-Fos (E-8): sc-166940 is recommended as a positive control antibody for Western Blot analysis of enhanced human Fos B expression in Fos B transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

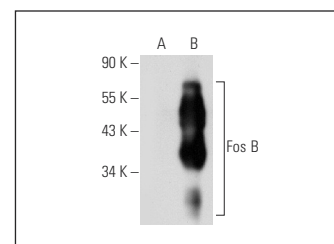
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



c-Fos (E-8) HRP: sc-166940 HRP. Direct western blot analysis of Fos B expression in non-transfected: sc-117752 (A) and mouse Fos B transfected: sc-112170 (B) 293T whole cell lysates.



Fos B (83B1138): sc-52926. 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.

RESEARCH USE

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

PROTOCOLS

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