

Fos B (h2): 293T Lysate: sc-177246

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.

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. I. Molecular analysis and characterization of a 75,000-Da gag-fos fusion product. *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. 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.
5. Renz, M., et al. 1987. Chromatin association and DNA-binding properties of the c-Fos protooncogene product. *Nucleic Acids Res.* 15: 277-292.
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.

CHROMOSOMAL LOCATION

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

PRODUCT

Fos B (h2): 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.

RESEARCH USE

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

APPLICATIONS

Fos B (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Fos B antibodies. Recommended use: 10-20 µl per lane.

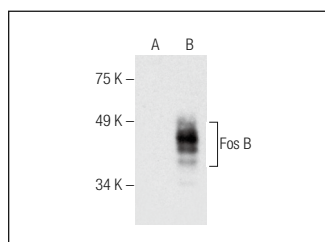
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Fos B (B-10): sc-390035 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).

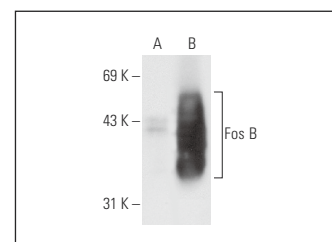
RECOMMENDED SUPPORT REAGENTS

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



Fos B (B-10): sc-390035. Western blot analysis of Fos B expression in non-transfected: sc-117752 (A) and human Fos B transfected: sc-177246 (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-177246 (B) 293T whole cell lysates.

PROTOCOLS

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