SANTA CRUZ BIOTECHNOLOGY, INC.

Jun B (h): 293T Lysate: sc-159648



BACKGROUND

The c-Jun proto-oncogene was first identified as the cellular homolog of the avian sarcoma virus v-Jun oncogene. The c-Jun protein along with c-Fos is a component of the AP-1 transcriptional complex. c-Jun can form either Jun/Jun homodimers or Jun/Fos heterodimers via the leucine repeats in both proteins. Homo- and heterodimers bind to the TGACTCA consensus sequence present in numerous promoters and initially identified as the phorbol ester tumor promoter response element (TRE). Two additional genes, Jun B and Jun D have been shown to be almost identical to c-Jun in their C-terminal regions, which are involved in dimerization and DNA binding, whereas their N-terminal domains, which are involved in transcriptional activation, diverge. All three form heterodimers among themselves and with c-Fos and other members of the Fos gene family.

REFERENCES

- Maki, Y., et al. 1987. Avian sarcoma virus 17 carries the Jun oncogene. Proc. Natl. Acad. Sci. USA 84: 2848-2852.
- 2. Nishimura, T., et al. 1988. The avian cellular homolog of the oncogene Jun. Oncogene 3: 659-663.
- 3. Curran, T., et al. 1988. Fos and Jun: the AP-1 connection. Cell 55: 395-397.
- Ryder, K., et al. 1988. Induction of proto-oncogene c-Jun by serum growth factors. Proc. Natl. Acad. Sci. USA 85: 8464-8467.
- Ryder, K., et at. 1989. Jun-D: a third member of the Jun gene family. Proc. Natl. Acad. Sci. USA 86: 1500-1503.
- Cohen, D.R., et al. 1989. The product of a Fos-related gene, Fra-1, binds cooperatively to the AP-1 site with Jun: transcription factor AP-1 is comprised of multiple protein complexes. Genes Dev. 3: 173-184.
- 7. Vogt, P.K., et al. 1990. Jun: oncogene and transcription factor. Adv. Cancer Res. 55: 1-35.
- 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.
- 9. 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: JUNB (human) mapping to 19p13.2.

PRODUCT

Jun B (h): 293T Lysate represents a lysate of human Jun B transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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.

PROTOCOLS

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

APPLICATIONS

Jun B (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Jun 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.

Jun B (C-11): sc-8051 is recommended as a positive control antibody for Western Blot analysis of enhanced human Jun B expression in Jun 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-lgGκ BP-HRP: sc-516102 or m-lgGκ 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



Jun B (C-11): sc-8051. Western blot analysis of Jun B expression in non-transfected: sc-117752 (**A**) and human Jun B transfected: sc-159648 (**B**) 293T whole cell lysates.

RESEARCH USE

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