SANTA CRUZ BIOTECHNOLOGY, INC.

Elf-1 (h): 293T Lysate: sc-114811

BACKGROUND

Ets-1 is the prototype member of a family of genes identified on the basis of homology to the v-Ets oncogene isolated from the E26 erythroblastosis virus. This family of genes currently includes Ets-1, Ets-2, Erg-1-3, Elk-1, Elf-1, Elf-5, NERF, PU.1, PEA3, ERM, FEV, ER81, Fli-1, TEL, Spi-B, ESE-1, ESE-3A, Net, ABT1 and ERF. Members of the Ets gene family exhibit varied patterns of tissue expression, and share a highly conserved carboxy-terminal domain containing a sequence related to the SV40 large T antigen nuclear localization signal sequence. This conserved domain is essential for Ets-1 binding to DNA and is likely to be responsible for the DNA-binding activity of all members of the Ets gene family. Elf-1 is a lymphoid-specific member of the Ets family that has been shown to regulate inducible gene expression during T cell activation. Elf-1 contains a sequence motif that is highly related to the Rb-binding sites common to several viral oncoproteins and binds to the pocket region of Rb both *in vivo* and *in vitro*.

REFERENCES

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2. Rao, V.N., et al. 1987. Erg, a human Ets-related gene on chromosome 21: alternative splicing, polyadenylation, and translation. Science 237: 635-639.
3. Rao, V.N., et al. 1989. Elk, tissue-specific Ets-related genes on chromosomes X and 14 near translocation breakpoints. Science 244: 66-70.
4. Burtis, K.C., et al. 1990. The *Drosophila* 74EF early puff contains E74, a complex ecdysone-inducible gene that encodes two Ets-related proteins. Cell 61: 85-99.
5. Kola, I., et al. 1993. The Ets-1 transcription factor is widely expressed during murine embryo development and is associated with mesodermal cells involved in morphogenetic processes such as organ formation. Proc. Natl. Acad. Sci. USA 90: 7588-7592.
6. Pongubala, J.M.R., et al. 1993. Effect of PU.1 phosphorylation on interaction with NF-EM5 and transcriptional activation. Science 259: 1622-1625.
7. Zhou, J., et al. 1998. A novel transcription factor, Elf-5, belongs to the Elf subfamily of Ets genes and maps to human chromosome 11p13-15, a region subject to LOH and rearrangement in human carcinoma cell lines. Oncogene 17: 2719-2732.
8. Tuomisto, T.T., et al. 2005. Analysis of gene and protein expression during monocyte-macrophage differentiation and cholesterol loading—cDNA and protein array study. Atherosclerosis 180: 283-291.
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CHROMOSOMAL LOCATION

Genetic locus: ELF1 (human) mapping to 13q14.11.

RESEARCH USE

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

PRODUCT

Elf-1 (h): 293T Lysate represents a lysate of human Elf-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Elf-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Elf-1 antibodies. Recommended use: 10-20 µl per lane.

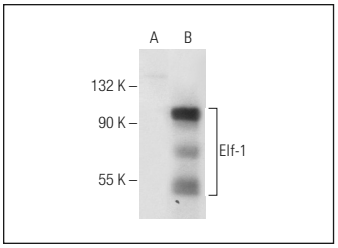
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Elf-1 (B-9): sc-133210 is recommended as a positive control antibody for Western Blot analysis of enhanced human Elf-1 expression in Elf-1 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



Elf-1 (B-9): sc-133210. Western blot analysis of Elf-1 expression in non-transfected: sc-117752 (**A**) and human Elf-1 transfected: sc-114811 (**B**) 293T whole cell lysates.

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.