SANTA CRUZ BIOTECHNOLOGY, INC.

Elf-5 (C-1): sc-376737



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, ER8I, 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-5 is a member of the Ets family that may be involved in lung, mammary, prostate and kidney function, and may also play a role in tumorigenesis.

REFERENCES

- Ghysdael, J., et al. 1986. Identification and preferential expression in thymic and bursal lymphocytes of a c-Ets oncogene-encoded M_r 54,000 cytoplasmic protein. Proc. Natl. Acad. Sci. USA 83: 1714-1718.
- 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.
- Rao, V.N., et al. 1989. Elk, tissue-specific Ets-related genes on chromosomes X and 14 near translocation breakpoints. Science 244: 66-70.

CHROMOSOMAL LOCATION

Genetic locus: ELF5 (human) mapping to 11p13.

SOURCE

Elf-5 (C-1) is a mouse monoclonal antibody raised against amino acids 101-162 mapping within an internal region of Elf-5 of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ kappa light chain 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-376737 X, 200 μ g/0.1 ml.

APPLICATIONS

Elf-5 (C-1) is recommended for detection of Elf-5 of human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Elf-5 siRNA (h): sc-37839, Elf-5 shRNA Plasmid (h): sc-37839-SH and Elf-5 shRNA (h) Lentiviral Particles: sc-37839-V.

Elf-5 (C-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Elf-5: 31 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Elf-5 (h): 293T Lysate: sc-113749 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA





Elf-5 (C-1): sc-376737. Western blot analysis of Elf-5 expression in non-transfected: sc-117752 (**A**) and human Elf-5 transfected: sc-113749 (**B**) 293T whole cell lysates.

Elf-5 (C-1): sc-376737. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization

SELECT PRODUCT CITATIONS

- McFall, T., et al. 2015. Role of the short isoform of the progesterone receptor in breast cancer cell invasiveness at estrogen and progesterone levels in the pre- and post-menopausal ranges. Oncotarget 6: 33146-33164.
- Li, K., et al. 2017. Elf-5-mediated AR activation regulates prostate cancer progression. Sci. Rep. 7: 42759.
- 3. Swahn, H., et al. 2019. Coordinate regulation of ELF5 and EHF at the chr11p13 CF modifier region. J. Cell. Mol. Med. 23: 7726-7740.
- Shen, H., et al. 2021. Mouse totipotent stem cells captured and maintained through spliceosomal repression. Cell 184: 2843-2859.e20.
- Dupont, C., et al. 2023. Efficient generation of ETX embryoids that recapitulate the entire window of murine egg cylinder development. Sci. Adv. 9: eadd2913.
- Li, S., et al. 2024. Capturing totipotency in human cells through spliceosomal repression. Cell 187: 3284-3302.e23.

STORAGE

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

RESEARCH USE

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