

# 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, 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-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

1. Ghysdael, J., et al. 1986. Identification and preferential expression in thymic and bursal lymphocytes of a c-Ets oncogene-encoded M<sub>r</sub> 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.
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.

## 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 µg IgG<sub>1</sub> 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 µg/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.

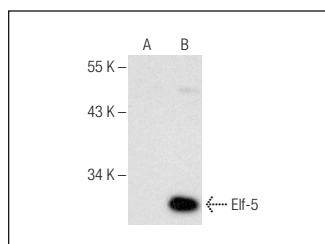
Molecular Weight of Elf-5: 31 kDa.

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

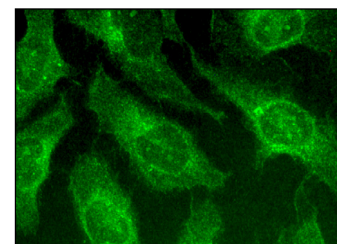
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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

1. 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.
2. 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.
4. Li, X., et al. 2021. Acetylation of ELF5 suppresses breast cancer progression by promoting its degradation and targeting CCND1. *NPJ Precis. Oncol.* 5: 20.
5. Shen, H., et al. 2021. Mouse totipotent stem cells captured and maintained through spliceosomal repression. *Cell* 184: 2843-2859.e20.
6. Dupont, C., et al. 2023. Efficient generation of ETX embryoids that recapitulate the entire window of murine egg cylinder development. *Sci. Adv.* 9: eadd2913.

## 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.