SANTA CRUZ BIOTECHNOLOGY, INC.

Elf-5 (G-2): sc-166653

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

Genetic locus: ELF5 (human) mapping to 11p13; Elf5 (mouse) mapping to 2 E2.

SOURCE

Elf-5 (G-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 220-255 at the C-terminus of Elf-5 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 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-166653 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-166653 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Elf-5 (G-2) is recommended for detection of Elf-5 of mouse, rat and 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); may cross-react with EHF, ESX, ESE-3a and ESE-3b.

Elf-5 (G-2) is also recommended for detection of Elf-5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Elf-5 siRNA (h): sc-37839, Elf-5 siRNA (m): sc-37840, Elf-5 shRNA Plasmid (h): sc-37839-SH, Elf-5 shRNA Plasmid (m): sc-37840-SH, Elf-5 shRNA (h) Lentiviral Particles: sc-37839-V and Elf-5 shRNA (m) Lentiviral Particles: sc-37840-V.

Elf-5 (G-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

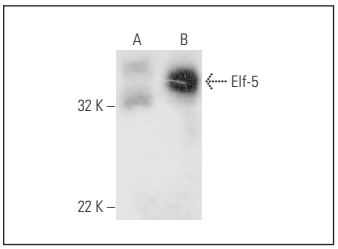
Molecular Weight of Elf-5: 31 kDa.

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

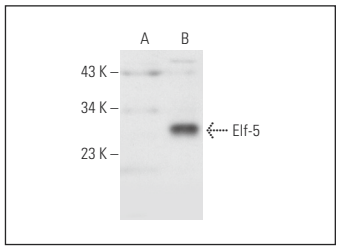
RECOMMENDED SUPPORT REAGENTS

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 (G-2): sc-166653. Western blot analysis of Elf-5 expression in non-transfected: sc-117752 (**A**) and human Elf-5 transfected: sc-176159 (**B**) 293T whole cell lysates.



Elf-5 (G-2): sc-166653. 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.

SELECT PRODUCT CITATIONS

1. Rubin, A.J., et al. 2017. Lineage-specific dynamic and pre-established enhancer-promoter contacts cooperate in terminal differentiation. Nat. Genet. 49: 1522-1528.
2. Li, X., et al. 2021. Acetylation of ELF5 suppresses breast cancer progression by promoting its degradation and targeting CCND1. NPJ Precis. Oncol. 5: 20.
3. Liu, J., et al. 2021. The RNA m^6A reader YTHDC1 silences retrotransposons and guards ES cell identity. Nature 591: 322-326.

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.

PROTOCOLS

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