

Elf-1 (B-9): sc-133210

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*.

CHROMOSOMAL LOCATION

Genetic locus: ELF1 (human) mapping to 13q14.11; Elf1 (mouse) mapping to 14 D3.

SOURCE

Elf-1 (B-9) is a mouse monoclonal antibody raised against amino acids 451-619 mapping at the C-terminus of Elf-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ 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-133210 X, 200 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

Elf-1 (B-9) is recommended for detection of Elf-1 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).

Suitable for use as control antibody for Elf-1 siRNA (h): sc-37837, Elf-1 siRNA (m): sc-37838, Elf-1 shRNA Plasmid (h): sc-37837-SH, Elf-1 shRNA Plasmid (m): sc-37838-SH, Elf-1 shRNA (h) Lentiviral Particles: sc-37837-V and Elf-1 shRNA (m) Lentiviral Particles: sc-37838-V.

Elf-1 (B-9) X TransCruz antibody is recommended for Gel Supershift and CHIP applications.

Molecular Weight of cytoplasmic Elf-1: 80 kDa.

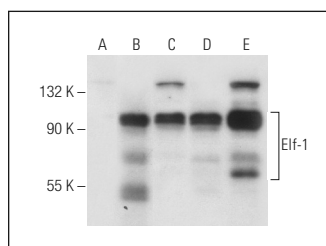
Molecular Weight of nuclear Elf-1: 98 kDa.

Positive Controls: Elf-1 (h): 293T Lysate: sc-114811, HeLa nuclear extract: sc-2120 or K-562 nuclear extract: sc-2130.

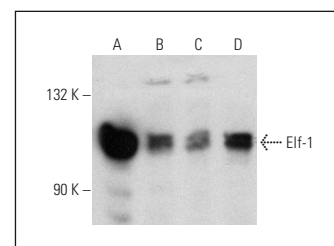
RECOMMENDED SUPPORT REAGENTS

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-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 and HeLa (C), A-431 (D) and K-562 (E) nuclear extracts.



Elf-1 (B-9): sc-133210. Western blot analysis of Elf-1 expression in Ramos (A), KARPAS-299 (B), NIH/3T3 (C) and RAW 264.7 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

- Yasar, P., et al. 2021. A CpG island promoter drives the CXXC5 gene expression. *Sci. Rep.* 11: 15655.
- Sasagawa, T., et al. 2023. CRISPR/Cas9-mediated mutations in both a cAMP response element and an ETS-binding site suppress FLT1 gene expression. *Exp. Cell Res.* 424: 113500.

STORAGE

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

PROTOCOLS

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