

## Elf-1 (C-20): sc-631

### 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 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Elf-1 of human origin.

### PRODUCT

Each vial contains 100 µg IgG 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-631 X, 200 µg/0.1 ml.

Elf-1 (C-20) is available conjugated to HRP (sc-631 HRP), 200 µg/ml, for WB, IHC(P) and ELISA.

Blocking peptide available for competition studies, sc-631 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Elf-1 (C-20) is recommended for detection of Elf-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Elf-1 (C-20) is also recommended for detection of Elf-1 in additional species, including equine and canine.

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.

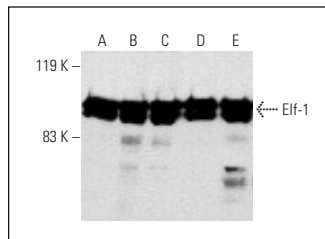
Elf-1 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Elf-1 cytoplasmic/nuclear: 80/98 kDa.

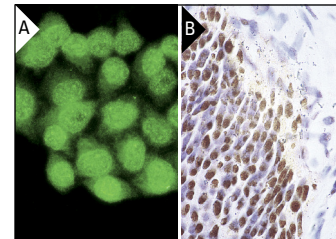
### STORAGE

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

### DATA



Elf-1 (C-20): sc-631. Western blot analysis of Elf-1 expression in HeLa (A), A-431 (B), A-673 (C), K-562 (D) and Jurkat (E) nuclear extracts.



Elf-1 (C-20): sc-631. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue showing intense nuclear staining (B).

### SELECT PRODUCT CITATIONS

1. Lecine, P., et al. 1996. Elf-1 and Stat5 bind to a critical element in a new enhancer of the human interleukin-2 receptor  $\alpha$  gene. *Mol. Cell. Biol.* 16: 6829-6840.
2. Chan, W.Y., et al. 2007. The paralogous hematopoietic regulators Lyl1 and Scl are coregulated by Ets and GATA factors, but Lyl1 cannot rescue the early Scl<sup>-/-</sup> phenotype. *Blood* 109: 1908-1916.
3. Nottingham, W.T., et al. 2007. Runx1-mediated hematopoietic stem-cell emergence is controlled by a Gata/Ets/SCL-regulated enhancer. *Blood* 110: 4188-4197.
4. Nischan, J., et al. 2009. Binding sites for ETS family of transcription factors dominate the promoter regions of differentially expressed genes in abdominal aortic aneurysms. *Circ. Cardiovasc. Genet.* 2: 565-572.
5. Munkert, A., et al. 2009. Characterization of the transcriptional regulation of the human MT1-MMP gene and association of risk reduction for focal-segmental glomerulosclerosis with two functional promoter SNPs. *Nephrol. Dial. Transplant.* 24: 735-742.
6. Du, M.J., et al. 2014. Estrogen induces Vav1 expression in human breast cancer cells. *PLoS ONE* 9: e99052.

### RESEARCH USE

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

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Try **Elf-1 (C-4): sc-133096** or **Elf-1 (B-9): sc-133210**, our highly recommended monoclonal alternatives to Elf-1 (C-20).