

# NERF (C-20): sc-6828

## 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. Several of these proteins have been shown to recognize similar motifs in DNA that share a centrally located 5'-GGAA-3' element.

## 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. 1989. Elk, tissue-specific Ets-related genes on chromosomes X and 14 near translocation breakpoints. *Science* 244: 66-70.
3. Burtis, K.C., et al. 1990. The *Drosophila* 74EF early puff contains E74, a complex ecdysone-inducible gene that encodes two Ets-related proteins. *Cell* 61: 85-99.
4. Pongubala, J.M., et al. 1993. Effect of PU.1 phosphorylation on interaction with NF-EM5 and transcriptional activation. *Science* 259: 1622-1625.
5. Xin, J.H., et al. 1992. Molecular cloning and characterization of PEA3, a new member of the Ets oncogene family that is differentially expressed in mouse embryonic cells. *Genes Dev.* 6: 481-496.
6. Kola, I., et al. 1993. The Ets1 transcription factor is widely expressed during murine embryo development and is associated with mesodermal cells involved in morphogenetic processes such as organ formation. *Proc. Natl. Acad. Sci. USA* 90: 7588-7592.

## CHROMOSOMAL LOCATION

Genetic locus: ELF2P4 (human) mapping to 2q32.1, ELF2 (human) mapping to 4q31.1; Elf2 (mouse) mapping to 3 C.

## SOURCE

NERF (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NERF of human origin.

## PRODUCT

Each vial contains 200 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-6828 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-6828 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

NERF (C-20) is recommended for detection of NERF-1a, NERF-1b and NERF-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

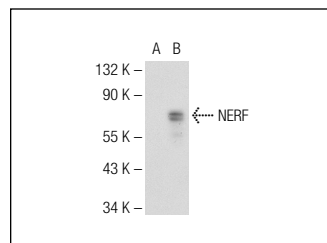
NERF (C-20) is also recommended for detection of NERF-1a, NERF-1b and NERF-2 in additional species, including equine, canine, bovine, porcine and avian.

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

Molecular Weight of NERF: 64 kDa.

Positive Controls: NERF (h2): 293T Lysate: sc-170205 or K-562 nuclear extract: sc-2130.

## DATA



NERF (C-20): sc-6828. Western blot analysis of NERF expression in non-transfected: sc-117752 (A) and human NERF transfected: sc-170205 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Zen, Y., et al. 2002. Lipopolysaccharide induces overexpression of MUC2 and MUC5AC in cultured biliary epithelial cells: Possible key phenomenon of hepatolithiasis. *Am. J. Pathol.* 161: 1475-1484.
2. Liu, J., et al. 2004. Synergistic activation of interleukin-12 p35 gene transcription by interferon regulatory factor-1 and interferon consensus sequence-binding protein. *J. Biol. Chem.* 279: 55609-55617.

## STORAGE

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


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Satisfaction  
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Try **NERF (224C4a): sc-130632**, our highly recommended monoclonal alternative to NERF (C-20).