

Erg-3 (R-20): sc-18136

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. Erg genes encode for multiple proteins due to alternative splicing and alternative usage of initiation codons.

REFERENCES

1. Ghysdael, J., Gegonne, A., Pognonec, P., Dernis, D., Leprince, D. and Stehelin, D. 1986. Identification and preferential expression in thymic and bursal lymphocytes of a c-Ets oncogene-encoded M_r 54,000 cytoplasmic protein. *Proc. Natl. Acad. Sci. USA* 83: 1714-1718.
2. Rao, V.N., Heubner, K., Isobe, M., Ar-Rushdi, A., Croce, C.M. and Reddy, E.S. 1989. Elk, tissue-specific Ets-related genes on chromosomes X and 14 near translocation breakpoints. *Science* 244: 66-70.
3. Burtis, K.C., Thummel, C.S., Jones, C.W., Karin, F.D. and Hogness, D.S. 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., Van Beveren, C., Nagulapalli, S., Klemsz, M.J., Mc Kercher, S.R., Maki, R.A. and Atchison, M.L. 1993. Effect of PU.1 phosphorylation on interaction with NF-EM5 and transcriptional activation. *Science* 259: 1622-1625.

CHROMOSOMAL LOCATION

Genetic locus: ERG (human) mapping to 21q22.3; Erg (mouse) mapping to 16 C4.

SOURCE

Erg-3 (R-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Erg-3 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-18136 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-18136 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Erg-3 (R-20) is recommended for detection of Erg-3 of mouse, rat, human and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

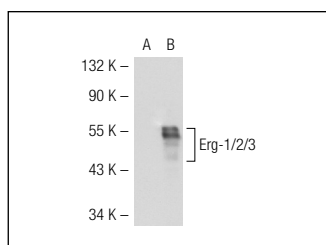
Erg-3 (R-20) is also recommended for detection of Erg-3 in additional species, including equine, canine, bovine, porcine and avian.

Erg-3 (R-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Erg-3 (R-20): sc-18136. Western blot analysis of Erg-1/2/3 expression in non-transfected: sc-117752 (A) and human Erg-1/2/3 transfected: sc-115805 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **Erg-1/2/3 (D-3): sc-271048** or **Erg-1/2/3 (C-1): sc-376293**, our highly recommended monoclonal alternatives to Erg-3 (R-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Erg-1/2/3 (D-3): sc-271048**.