

# Erg-1/2/3 (H-95): sc-28680

## 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., et al. 1986. Identification and preferential expression in thymic and bursal lymphocytes of a c-Ets oncogene-encoded Mr 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. 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.
5. Pongubala, J.M.R., et al. 1993. Effect of PU.1 phosphorylation on interaction with NF-EM5 and transcriptional activation. *Science* 259: 1622-1625.
6. Hewett, P.W., et al. 2001. Selective expression of Erg isoforms in human endothelial cells. *Int. J. Biochem. Cell Biol.* 33: 347-355.

## SOURCE

Erg-1/2/3 (H-95) is a rabbit polyclonal antibody raised against amino acids 26-120 mapping near the N-terminus of Erg-1 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-28680 X, 200 µg/0.1 ml.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

Erg-1/2/3 (H-95) is recommended for detection of Erg-1, Erg-2 and Erg-3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Erg-1/2/3 (H-95) is also recommended for detection of Erg-1, Erg-2 and Erg-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Erg-1/2/3 siRNA (h): sc-35333, Erg-1/2/3 siRNA (m): sc-35334, Erg-1/2/3 shRNA Plasmid (h): sc-35333-SH, Erg-1/2/3 shRNA Plasmid (m): sc-35334-SH, Erg-1/2/3 shRNA (h) Lentiviral Particles: sc-35333-V and Erg-1/2/3 shRNA (m) Lentiviral Particles: sc-35334-V.

Erg-1/2/3 (H-95) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

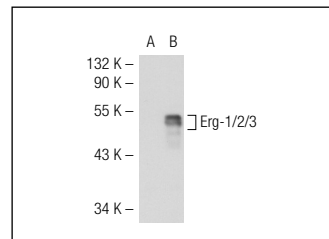
Molecular Weight of Erg-1: 38 kDa.

Molecular Weight of Erg-2: 49 kDa.

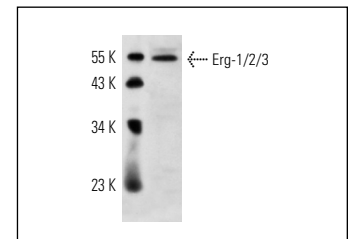
Molecular Weight of Erg-3: 55 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, Erg-1/2/3 (h): 293T Lysate: sc-115805 or Jurkat + PMA nuclear extract: sc-2133.

## DATA



Erg-1/2/3 (H-95): sc-28680. 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.



Erg-1/2/3 (H-95): sc-28680. Western blot analysis of Erg-1/2/3 expression in Jurkat nuclear extract.

## SELECT PRODUCT CITATIONS

1. Carver, B.S., et al. 2009. Aberrant ERG expression cooperates with loss of PTEN to promote cancer progression in the prostate. *Nat. Genet.* 41: 619-624.

## RESEARCH USE

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



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-1/2/3 (H-95). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Erg-1/2/3 (D-3): sc-271048**.