

## ERM (3H3): sc-293164

### 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 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 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

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2. Reddy, E.S.P., et al. 1987. The Erg gene: a human gene related to the Ets oncogene. *Proc. Natl. Acad. Sci. USA* 84: 6131-6135.
3. Rao, V.N., et al. 1989. Elk, tissue-specific Ets-related genes on chromosomes X and 14 near translocation breakpoints. *Science* 244: 66-70.
4. Fisher, C.L., et al. 1991. Ligation of membrane Ig leads to calcium-mediated phosphorylation of the proto-oncogene product, Ets-1. *J. Immunol.* 146: 1743-1749.
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. Monte, D., et al. 1994. Molecular cloning and characterization of human ERM, a new member of the Ets family closely related to mouse PEA3 and ER81 transcription factors. *Oncogene* 9: 1397-1406.
7. Jeon, I.S., et al. 1995. A variant Ewing's sarcoma translocation (7;22) fuses the EWS gene to the ETS gene ETV1. *Oncogene* 10: 1229-1234.
8. Dziadek, M.A., et al. 2007. Biochemical properties and cellular localisation of STIM proteins. *Cell Calcium* 42: 123-132.
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### CHROMOSOMAL LOCATION

Genetic locus: ETV5 (human) mapping to 3q27.2; Etv5 (mouse) mapping to 16 B1.

### SOURCE

ERM (3H3) is a mouse monoclonal antibody raised against recombinant protein fragment corresponding to ERM of human origin.

### RESEARCH USE

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

### PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

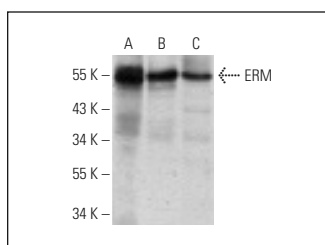
ERM (3H3) is recommended for detection of ERM of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ERM siRNA (h): sc-37849, ERM siRNA (m): sc-37850, ERM shRNA Plasmid (h): sc-37849-SH, ERM shRNA Plasmid (m): sc-37850-SH, ERM shRNA (h) Lentiviral Particles: sc-37849-V and ERM shRNA (m) Lentiviral Particles: sc-37850-V.

Molecular Weight of ERM: 72 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MCF7 whole cell lysate: sc-2206 or NIH/3T3 whole cell lysate: sc-2210.

### DATA



ERM (3H3): sc-293164. Western blot analysis of ERM expression in Jurkat (A), NIH/3T3 (B) and MCF7 (C) whole cell lysates.

### 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) for detailed protocols and support products.