SANTA CRUZ BIOTECHNOLOGY, INC.

ERM (H-100): sc-22807

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

ERM (H-100) is a rabbit polyclonal antibody raised against amino acids 121-220 of ERM 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-22807 X, 200 µg/0.1 ml.

APPLICATIONS

ERM (H-100) 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)], 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).

ERM (H-100) is also recommended for detection of ERM in additional species, including equine, canine, bovine and porcine.

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.

ERM (H-100) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ERM: 72 kDa.

Positive Controls: MDA-MB-468 cell lysate: sc-2282, MCF7 whole cell lysate: sc-2206 or SK-N-MC cell lysate: sc-2237.

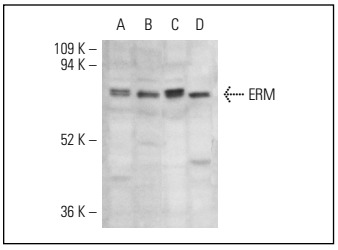
RESEARCH USE

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

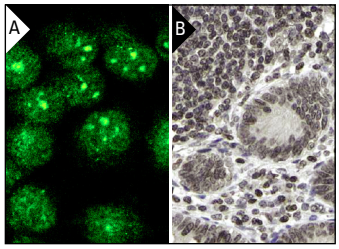
STORAGE

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

DATA



ERM (H-100): sc-22807. Western blot analysis of ERM expression in MDA-MB-468 (**A**), SK-N-MC (**B**), HeLa (**C**) and MCF7 (**D**) whole cell lysates.



ERM (H-100): sc-22807. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing nuclear staining of glandular cells and lymphoid tissue at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program (**B**).

SELECT PRODUCT CITATIONS

1. Kawamura-Saito, M., et al. 2006. Fusion between CIC and DUX4 up-regulates PEA3 family genes in Ewing-like sarcomas with t(4;19)(q35;q13) translocation. Hum. Mol. Genet. 15: 2125-2137.
2. Monge, M., et al. 2009. Proteomic approach to ETV5 during endometrial carcinoma invasion reveals a link to oxidative stress. Carcinogenesis 30: 1288-1297.
3. Simon, L., et al. 2010. ETV5 regulates sertoli cell chemokines involved in mouse stem/progenitor spermatogonia maintenance. Stem Cells 28: 1882-1892.
4. Llauradó, M., et al. 2011. ETV5 transcription factor is overexpressed in ovarian cancer and regulates cell adhesion in ovarian cancer cells. Int. J. Cancer 130: 1532-1543.
5. Wu, X., et al. 2011. Spermatogonial stem cell self-renewal requires ETV5-mediated downstream activation of Brachyury in mice. Biol. Reprod. 85: 1114-1123.
6. Garcia, C.M., et al. 2011. The function of FGF signaling in the lens placode. Dev. Biol. 351: 176-185.
7. Euhus, D., et al. 2011. Tamoxifen downregulates ets oncogene family members ETV4 and ETV5 in benign breast tissue: implications for durable risk reduction. Cancer Prev. Res. 4: 1852-1862.