SANTA CRUZ BIOTECHNOLOGY, INC.

Ets-1 (C-20): sc-350

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 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. Evidence indicates that the DNA binding activity by Ets-1 is regulated at the level of phosphorylation.

CHROMOSOMAL LOCATION

Genetic locus: ETS1 (human) mapping to 11q24.3; Ets1 (mouse) mapping to 9 A4.

SOURCE

Ets-1 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Ets-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.

Blocking peptide available for competition studies, sc-350 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-350 AC, 500 µg/0.25 ml agarose in 1 ml; and as TransCruz reagent for Gel Supershift and ChIP applications, sc-350 X, 200 µg/0.1 ml.

APPLICATIONS

Ets-1 (C-20) is recommended for detection of Ets-1 p54 of mouse, rat, human and *Xenopus laevis* 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).

Ets-1 (C-20) is also recommended for detection of Ets-1 p54 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ets-1 siRNA (h): sc-29309, Ets-1 siRNA (m): sc-35346, Ets-1 shRNA Plasmid (h): sc-29309-SH, Ets-1 shRNA Plasmid (m): sc-35346-SH, Ets-1 shRNA (h) Lentiviral Particles: sc-29309-V and Ets-1 shRNA (m) Lentiviral Particles: sc-35346-V.

Ets-1 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

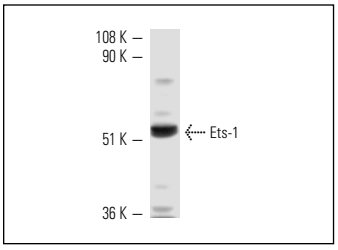
Molecular Weight of Ets-1: 55 kDa.

Positive Controls: KNRK nuclear extract: sc-2141.

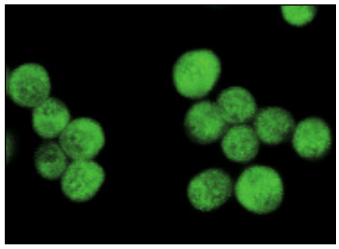
STORAGE

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

DATA



Ets-1 (C-20): sc-350. Western blot analysis of Ets-1 expression in KNRK nuclear extract.



Ets-1 (C-20): sc-350. Immunofluorescence staining of methanol-fixed KNRK cells showing nuclear localization.

SELECTED PRODUCT CITATIONS

1. Yang, C., et al. 1998. A role for CREB binding protein and p300 transcriptional coactivators in Ets-1 transactivation functions. Mol. Cell. Biol. 18: 2218-2229.
2. Vinay, D.S., et al. 2004. CD137-deficient mice have reduced NK/NKT cell numbers and function, are resistant to lipopolysaccharide-induced shock syndromes, and have lower IL-4 responses. J. Immunol. 173: 4218-4229.
3. Wynes, M.W., et al. 2005. Transcription of macrophage IGF-I exon 1 is positively regulated by the 5'-untranslated region and negatively regulated by the 5'-flanking region. Am. J. Physiol. Lung Cell. Mol. Physiol. 288: 1089-1098.
4. Sutter, W., et al. 2009. Effect of different biomaterials on the expression pattern of the transcription factor Ets2 in bone-like constructs. J. Craniomaxillofac. Surg. 37: 263-271.
5. Bosman, J.D., et al. 2010. Regulation of αB-crystallin gene expression by the transcription factor Ets1 in breast cancer. Breast Cancer Res. Treat. 119: 63-70.
6. Kaddatz, K., et al. 2010. Transcriptional profiling identifies functional interactions of TGF β and PPAR β/δ signaling: synergistic induction of ANGPTL4 transcription. J. Biol. Chem. 285: 29469-29479.
7. Wang, H., et al. 2011. Genome-wide analysis reveals conserved and divergent features of Notch1/RBPJ binding in human and murine T-lymphoblastic leukemia cells. Proc. Natl. Acad. Sci. USA 108: 14908-14913.
8. van der Gun, B.T., et al. 2011. Transcription factors and molecular epigenetic marks underlying EpCAM overexpression in ovarian cancer. Br. J. Cancer 105: 312-319.
9. del Blanco, B., et al. 2012. Tcra enhancer activation by inducible transcription factors downstream of pre-TCR signaling. J. Immunol. 188: 3278-3293.

RESEARCH USE

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