

Ets-1/Ets-2 (C-275): sc-112

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, ETS2 (human) mapping to 21q22.2; Ets1 (mouse) mapping to 9 A4, Ets2 (mouse) mapping to 16 C4.

SOURCE

Ets-1/Ets-2 (C-275) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the highly conserved C-terminal domain 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-112 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-112 X, 200 µg/0.1 ml.

Available as agarose conjugate for immunoprecipitation, sc-112 AC, 500 µg/ 0.25 ml agarose in 1 ml.

APPLICATIONS

Ets-1/Ets-2 (C-275) is recommended for detection of Ets-1 and Ets-2 of mouse, rat, human, *Drosophila melanogaster*, *Xenopus laevis* and *Caenorhabditis elegans* 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); may cross-react with FEV, Fli-1 and Erg-1/2/3.

Ets-1/Ets-2 (C-275) is also recommended for detection of Ets-1 and Ets-2 in additional species, including equine, canine, bovine, porcine and avian.

Ets-1/Ets-2 (C-275) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

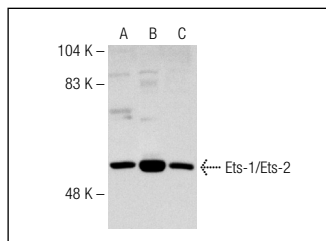
Molecular Weight of Ets-1/Ets-2: 55 kDa.

Positive Controls: Erg-1/2/3 (h): 293T Lysate: sc-115805, KNRK nuclear extract: sc-2141 or 3611-RF nuclear extract: sc-2143.

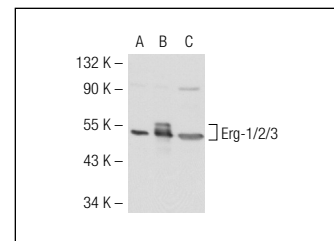
STORAGE

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

DATA



Ets-1/Ets-2 (C-275): sc-112. Western blot analysis of Ets-1/Ets-2 expression in MM-142 (A), KNRK (B) and 3611-RF (C) nuclear extracts.



Ets-1/Ets-2 (C-275): sc-112. Western blot analysis of Erg-1/2/3 expression in non-transfected 293T: sc-117752 (A), human Erg-1/2/3 transfected 293T: sc-115805 (B) and Jurkat (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Chen, H.M. and Boxer, L.M. 1995. Pi 1 binding sites are negative regulators of bcl-2 expression in pre-B cells. *Mol. Cell. Biol.* 15: 3840-3847.
- Grant, P.A., et al. 1995. IgM receptor-mediated transactivation of the IgH 3' enhancer couples a novel Elf-1-AP-1 protein complex to the developmental control of enhancer function. *EMBO J.* 14: 4501-4513.
- Takeshita, F., et al. 2004. Transcriptional regulation of the human TLR9 gene. *J. Immunol.* 173: 2552-2561.
- Han, J., et al. 2005. Hepatocyte growth factor induces redistribution of p21^{CIP1} and p27^{KIP1} through ERK-dependent p16^{INK4a} up-regulation, leading to cell cycle arrest at G₁ in HepG2 hepatoma cells. *J. Biol. Chem.* 280: 31548-31556.
- Cho, S.J. and Kang, C.J. 2005. A Stat5-overlapping site is critical for the IgJ enhancer activity in the plasma cells and bound by a ubiquitous protein. *Biochem. Biophys. Res. Commun.* 338: 1897-1905.
- Patton, J., et al. 2006. Identification of functional elements in the murine Gabp α /ATP synthase coupling factor 6 bi-directional promoter. *Gene* 369: 35-44.
- Yang, Z.F., et al. 2007. The Ets transcription factor GABP is required for cell-cycle progression. *Nat. Cell Biol.* 9: 339-346.

RESEARCH USE

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



Try **Ets-1/Ets-2 (D-7): sc-374509** or **Ets-2 (E-5): sc-365666**, our highly recommended monoclonal alternatives to Ets-1/Ets-2 (C-275).