

Ets-1 (N-276): sc-111

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 (N-276) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the highly divergent amino-terminal domain of Ets-1 p54 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-111 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-111 X, 200 µg/0.1 ml.

APPLICATIONS

Ets-1 (N-276) 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 (N-276) 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.

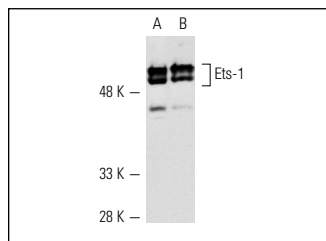
Ets-1 (N-276) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Ets-1: 55 kDa.

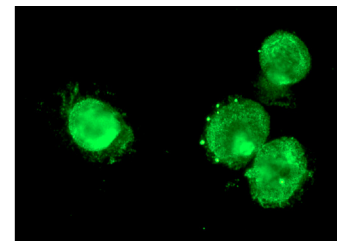
STORAGE

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

DATA



Ets-1 (N-276): sc-111. Western blot analysis of Ets-1 expression in Jurkat (A,B) nuclear extract.



Ets-1 (N-276): sc-111. Immunofluorescence staining of methanol-fixed Jurkat cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Robert, M. 1975. Oxygen affinity of haemoglobin. *Bull. Physiopathol. Respir.* 11: 79-170.
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- Shukla, A.A., et al. 2010. Ets-1/Elk-1 is a critical mediator of dipeptidyl-peptidase III transcription in human glioblastoma cells. *FEBS J.* 277: 1861-1875.
- Gao, Z., et al. 2010. Ets1 is required for proper migration and differentiation of the cardiac neural crest. *Development* 137: 1543-1551.
- Kumar, P., et al. 2010. Interactive roles of Ets-1, Sp1, and acetylated histones in the retinoic acid-dependent activation of guanylyl cyclase/atrial natriuretic peptide receptor-A gene transcription. *J. Biol. Chem.* 285: 37521-37530.
- Chouli-Li, S., et al. 2010. Caspase cleavage of Ets-1 p51 generates fragments with transcriptional dominant-negative function. *Biochem. J.* 426: 229-241.
- Yang, X., et al. 2010. Appearance of the pituitary factor Pit-1 increases chromatin remodeling at hypersensitive site III in the human GH locus. *J. Mol. Endocrinol.* 45: 19-32.
- Miyamoto, N., et al. 2011. Quercetin induces the expression of peroxiredoxins 3 and 5 via the Nrf2/NRF1 transcription pathway. *Invest. Ophthalmol. Vis. Sci.* 52: 1055-1063.
- Pignon, A., et al. 2011. Exercise training in ovariectomized rats stimulates estrogenic-like effects on expression of genes involved in lipid accumulation and subclinical inflammation in liver. *Metab. Clin. Exp.* 60: 629-639.

RESEARCH USE

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