

Ets-2 (E-5): sc-365666

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.

REFERENCES

1. Ghysdael, J., et al. 1986. Identification and preferential expression in thymic and bursal lymphocytes of a c-Ets oncogene-encoded M_r 54,000 cytoplasmic protein. *Proc. Natl. Acad. Sci. USA* 83: 1714-1718.
2. Rao, V.N., et al. 1987. Erg, a human Ets-related gene on chromosome 21: alternative splicing, polyadenylation, and translation. *Science* 237: 635-639.

CHROMOSOMAL LOCATION

Genetic locus: ETS2 (human) mapping to 21q22.2; Ets2 (mouse) mapping to 16 C4.

SOURCE

Ets-2 (E-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 441-469 at the C-terminus of Ets-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-365666 X, 200 µg/0.1 ml.

Ets-2 (E-5) is available conjugated to agarose (sc-365666 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365666 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365666 PE), fluorescein (sc-365666 FITC), Alexa Fluor® 488 (sc-365666 AF488), Alexa Fluor® 546 (sc-365666 AF546), Alexa Fluor® 594 (sc-365666 AF594) or Alexa Fluor® 647 (sc-365666 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365666 AF680) or Alexa Fluor® 790 (sc-365666 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365666 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

Ets-2 (E-5) is recommended for detection of Ets-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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-2 (E-5) is also recommended for detection of Ets-2 in additional species, including canine and bovine.

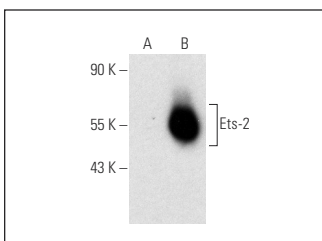
Suitable for use as control antibody for Ets-2 siRNA (h): sc-37855, Ets-2 siRNA (m): sc-37856, Ets-2 shRNA Plasmid (h): sc-37855-SH, Ets-2 shRNA Plasmid (m): sc-37856-SH, Ets-2 shRNA (h) Lentiviral Particles: sc-37855-V and Ets-2 shRNA (m) Lentiviral Particles: sc-37856-V.

Ets-2 (E-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

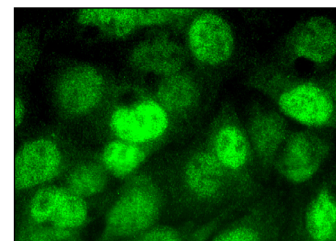
Molecular Weight of Ets-2: 55 kDa.

Positive Controls: Ets-2 (m): 293T Lysate: sc-120131, Jurkat nuclear extract: sc-2132 or K-562 nuclear extract: sc-2130.

DATA



Ets-2 (E-5): sc-365666. Western blot analysis of Ets-2 expression in non-transfected: sc-117752 (A) and mouse Ets-2 transfected: sc-120131 (B) 293T whole cell lysates.



Ets-2 (E-5): sc-365666. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Chang, H., et al. 2016. Synergistic action of master transcription factors controls epithelial-to-mesenchymal transition. *Nucleic Acids Res.* 44: 2514-2527.
2. Huang, C., et al. 2017. MicroRNA-101 attenuates pulmonary fibrosis by inhibiting fibroblast proliferation and activation. *J. Biol. Chem.* 292: 16420-16439.
3. Cheng, Y., et al. 2020. Host cytosolic RNA sensing pathway promotes T lymphocyte-mediated mycobacterial killing in macrophages. *PLoS Pathog.* 16: e1008569.
4. Ji, S., et al. 2021. Suppression of CD13 enhances the cytotoxic effect of chemotherapeutic drugs in hepatocellular carcinoma cells. *Front. Pharmacol.* 12: 660377.

RESEARCH USE

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