

# Ets-1/Ets-2 (D-7): sc-374509

## 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 (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 353-383 within the highly conserved C-terminal domain of Ets-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgM 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-374509 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-374509 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## RESEARCH USE

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

## APPLICATIONS

Ets-1/Ets-2 (D-7) is recommended for detection of Ets-1 and 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); may cross-react with FEV, Fli-1 or Erg-1/2/3.

Ets-1/Ets-2 (D-7) is also recommended for detection of Ets-1 and Ets-2 in additional species, including avian.

Ets-1/Ets-2 (D-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

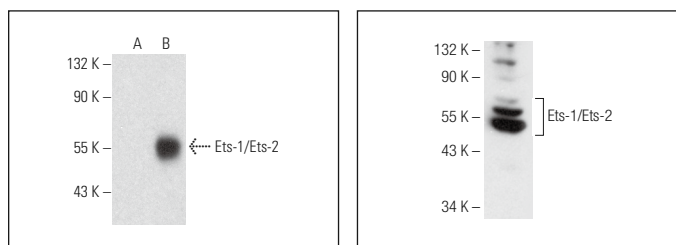
Molecular Weight of Ets-1/Ets-2: 55 kDa.

Positive Controls: Ets-1 (m): 293T Lysate: sc-120130, KNRK nuclear extract: sc-2141 or CCRF-CEM nuclear extract: sc-2146.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Ets-1/Ets-2 (D-7): sc-374509. Western blot analysis of Ets-1/Ets-2 expression in non-transfected: sc-117752 (A) and mouse Ets-1 transfected: sc-120130 (B) 293T whole cell lysates.

Ets-1/Ets-2 (D-7): sc-374509. Western blot analysis of Ets-1/Ets-2 expression in KNRK nuclear extract.

## SELECT PRODUCT CITATIONS

- Haridhasapavalan, K.K., et al. 2020. Codon optimization, cloning, expression, purification, and secondary structure determination of human ETS2 transcription factor. *Mol. Biotechnol.* 62: 485-494.
- Huang, L., et al. 2021. Targeting pan-ETS factors inhibits melanoma progression. *Cancer Res.* 81: 2071-2085.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **Ets-1 (C-4): sc-55581** for Ets-1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.