

TDP2 (16): sc-130314

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. The Ets-1-associated protein II (EAPII, also designated TDP2) interacts with Ets-1 as a negative modulator of Ets-1 transcriptional activity. TDP2 predominantly localizes to the nucleus.

REFERENCES

1. Ghysdael, J., et al. 1986. Identification and preferential expression in thymic and bursal lymphocytes of a c-Ets oncogene-encoded Mr 54,000 cytoplasmic protein. *Proc. Natl. Acad. Sci. USA* 83: 1714.
2. Reddy, E.S.P., et al. 1987. The Erg gene: a human gene related to the Ets oncogene. *Proc. Natl. Acad. Sci. USA* 84: 6131-6135.
3. Rao, V.N., et al. 1987. Erg, a human Ets-related gene on chromosome 21: alternative splicing, polyadenylation, and translation. *Science* 237: 635.
4. Rao, V.N., et al. 1989. Elk, tissue-specific Ets-related genes on chromosomes X and 14 near translocation breakpoints. *Science* 244: 66-70.
5. Burtis, K.C., et al. 1990. The *Drosophila* 74EF early puff contains E74, a complex ecdysone-inducible gene that encodes two Ets-related proteins. *Cell* 61: 85-99.
6. Fisher, C.L., et al. 1991. Ligation of membrane Ig leads to calcium-mediated phosphorylation of the proto-oncogene product, Ets-1. *J. Immunol.* 146: 1743-1749.
7. Xin, J.H., et al. 1992. Molecular cloning and characterization of PEA3, a new member of the Ets oncogene family that is differentially expressed in mouse embryonic cells. *Genes Dev.* 6: 481-496.

CHROMOSOMAL LOCATION

Genetic locus: TDP2 (human) mapping to 6p22.3; Tdp2 (mouse) mapping to 13 A3.1.

SOURCE

TDP2 (16) is a mouse monoclonal antibody raised against recombinant EAPII of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TDP2 (16) is recommended for detection of TDP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TDP2 siRNA (h): sc-60566, TDP2 siRNA (m): sc-60567, TDP2 shRNA Plasmid (h): sc-60566-SH, TDP2 shRNA Plasmid (m): sc-60567-SH, TDP2 shRNA (h) Lentiviral Particles: sc-60566-V and TDP2 shRNA (m) Lentiviral Particles: sc-60567-V.

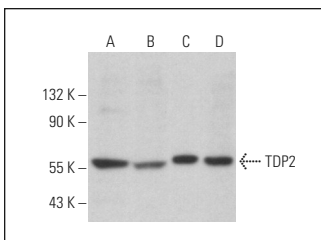
Molecular Weight of TDP2: 49 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176, NTERA-2 cl.D1 whole cell lysate: sc-364181 or U266 whole cell lysate: sc-364800.

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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

DATA



TDP2 (16): sc-130314. Western blot analysis of TDP2 expression in U266 (A), U-251-MG (B), NTERA-2 cl.D1 (C) and KNRK (D) whole cell lysates.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.