

**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. 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. TEL (for translocation, Ets, leukemia), also designated ETV6, is a member of the Ets family that is involved in specific chromosomal translocations in human leukemia and sarcoma.

CHROMOSOMAL LOCATION

Genetic locus: ETV6 (human) mapping to 12p13.2; Etv6 (mouse) mapping to 6 G1.

SOURCE

TEL (E-1) is a mouse monoclonal antibody raised against amino acids 119-332 of TEL 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-166835 X, 200 µg/0.1 ml.

TEL (E-1) is available conjugated to agarose (sc-166835 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166835 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166835 PE), fluorescein (sc-166835 FITC), Alexa Fluor® 488 (sc-166835 AF488), Alexa Fluor® 546 (sc-166835 AF546), Alexa Fluor® 594 (sc-166835 AF594) or Alexa Fluor® 647 (sc-166835 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166835 AF680) or Alexa Fluor® 790 (sc-166835 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TEL (E-1) is recommended for detection of TEL 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).

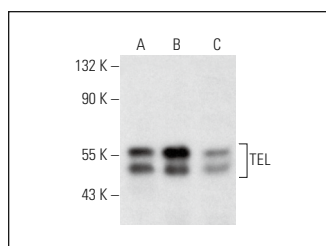
Suitable for use as control antibody for TEL siRNA (h): sc-36635, TEL siRNA (m): sc-36636, TEL shRNA Plasmid (h): sc-36635-SH, TEL shRNA Plasmid (m): sc-36636-SH, TEL shRNA (h) Lentiviral Particles: sc-36635-V and TEL shRNA (m) Lentiviral Particles: sc-36636-V.

TEL (E-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

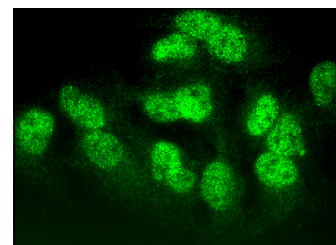
Molecular Weight of TEL: 57 kDa.

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 A/G PLUS-Agarose: sc-2003 (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

TEL (E-1): sc-166835. Western blot analysis of TEL expression in CCRF-CEM (A), RT-4 (B) and Jurkat (C) whole cell lysates.



TEL (E-1): sc-166835. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Teppo, S., et al. 2016. Genome-wide repression of eRNA and target gene loci by the ETV6-RUNX1 fusion in acute leukemia. *Genome Res.* 26: 1468-1477.
2. Grönroos, T., et al. 2017. Overexpression of PTP4A3 in ETV6-RUNX1 acute lymphoblastic leukemia. *Leuk. Res.* 54: 1-6.
3. Yoshino, H., et al. 2020. Functional characterization of a germline ETV6 variant associated with inherited thrombocytopenia, acute lymphoblastic leukemia, and salivary gland carcinoma in childhood. *Int. J. Hematol.* 112: 217-222.
4. Lierman, E., et al. 2023. t(9;12)(q22;p13) ETV6::SYK: a new recurrent cytogenetic aberration and tyrosine kinase gene fusion in myeloid or lymphoid neoplasms associated with eosinophilia. *Br. J. Haematol.* 200: 665-668.
5. Lu, D.Y., et al. 2023. The ETS transcription factor ETV6 constrains the transcriptional activity of EWS-FLI1 to promote Ewing sarcoma. *Nat. Cell Biol.* 25: 285-297.
6. Gnanapragasam, M.N., et al. 2023. Identification of a genomic DNA sequence that quantitatively modulates KLF1 transcription factor expression in differentiating human hematopoietic cells. *Sci. Rep.* 13: 7589.

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.