

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 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TEL 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-8546 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-8546 X, 200 µg/0.1 ml.

APPLICATIONS

TEL (N-19) is recommended for detection of TEL of mouse, rat and human 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).

TEL (N-19) is also recommended for detection of TEL in additional species, including equine, canine, bovine, porcine and avian.

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.

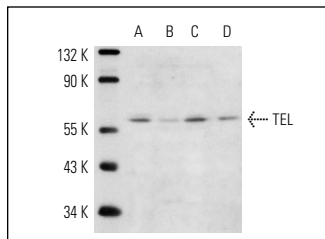
TEL (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TEL: 57 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, Jurkat nuclear extract: sc-2132 or K-562 nuclear extract: sc-2130.

STORAGE

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

DATA

TEL (N-19): sc-8546. Western blot analysis of TEL expression in Jurkat (A), K-562 (B) and CCRF-CEM (C) nuclear extracts and CCRF-CEM (D) whole cell lysate.

SELECT PRODUCT CITATIONS

- Petrie, K., et al. 2003. The histone deacetylase 9 gene encodes multiple protein isoforms. *J. Biol. Chem.* 278: 16059-16072.
- Maki, K., et al. 2004. Leukemia-related transcription factor TEL is negatively regulated through extracellular signal-regulated kinase-induced phosphorylation. *Mol. Cell. Biol.* 24: 3227-3237.
- Nakamura, F., et al. 2005. Cloning and characterization of the novel chimeric gene TEL/PTPRR in acute myelogenous leukemia with inv(12)(p13q13). *Cancer Res.* 65: 6612-6621.
- Fischer, M., et al. 2005. Defining the oncogenic function of the TEL/AML1 (ETV6/RUNX1) fusion protein in a mouse model. *Oncogene* 24: 7579-7591.
- Sohn, R.H., et al. 2005. Regulation of endothelial thrombomodulin expression by inflammatory cytokines is mediated by activation of nuclear factor-κ B. *Blood* 105: 3910-3917.
- Takahashi, W., et al. 2005. TEL/ETV6 accelerates erythroid differentiation and inhibits megakaryocytic maturation in a human leukemia cell line UT-7/GM. *Cancer Sci.* 96: 340-348.
- Vu, H.A., et al. 2006. FLT3 is fused to ETV6 in a myeloproliferative disorder with hypereosinophilia and a t(12;13)(p13;q12) translocation. *Leukemia* 20: 1414-1421.
- Dobbin, E., et al. 2010. Proteomic analysis reveals a novel mechanism induced by the leukemic oncogene Tel/PDGFRβ in stem cells: activation of the interferon response pathways. *Stem Cell Res.* 5: 226-243.

RESEARCH USE

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

PROTOCOLS

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