

TEL2 (X-19): sc-102131

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 which contains a sequence related to the SV40 large T antigen nuclear localization sequence. This conserved carboxy 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. TEL2, also known as ETV7 (Ets variant gene 7), TREF or TELB, is a 341 amino acid nuclear protein that contains one PNT domain and one Ets DNA-binding domain. Expressed in hematopoietic tissue, TEL2 belongs to the Ets family and functions as a transcriptional repressor that binds to the DNA sequence 5'-CCGGAAGT-3'. Defects in the gene encoding TEL2 are associated with B cell malignancies, suggesting an important role for TEL2 in carcinogenesis. Seven isoforms (designated A-G) of TEL2 exist due to alternative splicing events.

REFERENCES

- Potter, M.D., et al. 2000. Identification and characterization of a new human Ets family transcription factor, TEL2, that is expressed in hematopoietic tissues and can associate with TEL1/ETV6. *Blood* 95: 3341-3348.
- Poirel, H., et al. 2000. Characterization of a novel Ets gene, TELB, encoding a protein structurally and functionally related to TEL. *Oncogene* 19: 4802-4806.
- Gu, X., et al. 2001. TEL2 is a novel transcriptional repressor related to the Ets factor TEL/ETV6. *J. Biol. Chem.* 276: 9421-9436.
- Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605255. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Sakurai, T., et al. 2003. Effects of overexpression of the Ets family transcription factor TEL on cell growth and differentiation of K-562 cells. *Int. J. Oncol.* 22: 1327-1333.
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- Cardone, M., et al. 2005. The novel Ets factor TEL2 cooperates with Myc in B lymphomagenesis. *Mol. Cell. Biol.* 25: 2395-2405.
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CHROMOSOMAL LOCATION

Genetic locus: ETV7 (human) mapping to 6p21.31.

SOURCE

TEL2 (X-19) is an affinity purified rabbit polyclonal antibody raised against TEL2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 50 µg IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

TEL2 (X-19) is recommended for detection of TEL2 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TEL2 siRNA (h): sc-95523, TEL2 shRNA Plasmid (h): sc-95523-SH and TEL2 shRNA (h) Lentiviral Particles: sc-95523-V.

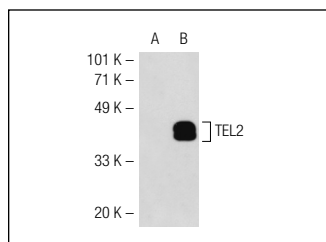
Molecular Weight of TEL2 isoforms: 30-39 kDa.

Positive Controls: TEL2 (h): 293T Lysate: sc-115379 or HeLa whole cell lysate: sc-2200.

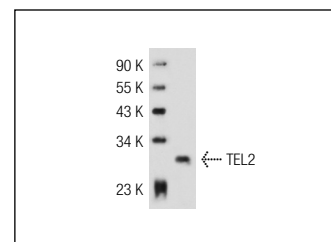
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



TEL2 (X-19): sc-102131. Western blot analysis of TEL2 expression in non-transfected: sc-117752 (A) and human TEL2 transfected: sc-115379 (B) 293T whole cell lysates.



TEL2 (X-19): sc-102131. Western blot analysis of TEL2 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

- Nischan, J., et al. 2009. Binding sites for ETS family of transcription factors dominate the promoter regions of differentially expressed genes in abdominal aortic aneurysms. *Circ. Cardiovasc. Genet.* 2: 565-572.

STORAGE

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