SANTA CRUZ BIOTECHNOLOGY, INC.

TEL2 (h): 293T Lysate: sc-115379

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

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2. 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.
3. Gu, X., et al. 2001. TEL2 is a novel transcriptional repressor related to the Ets factor TEL/ETV6. J. Biol. Chem. 276: 9421-9436.
4. 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/
5. 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.
6. Boccuni, P., et al. 2003. The human L(3)MBT polycomb group protein is a transcriptional repressor and interacts physically and functionally with TEL (ETV6). J. Biol. Chem. 278: 15412-15420.
7. 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.

PRODUCT

TEL2 (h): 293T Lysate represents a lysate of human TEL2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

TEL2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive TEL2 antibodies. Recommended use: 10-20 µl per lane.

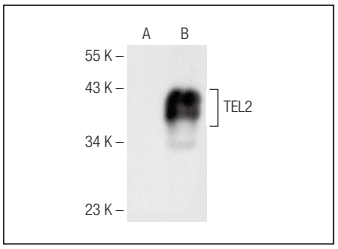
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TEL2 (F-8): sc-376137 is recommended as a positive control antibody for Western Blot analysis of enhanced human TEL2 expression in TEL2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

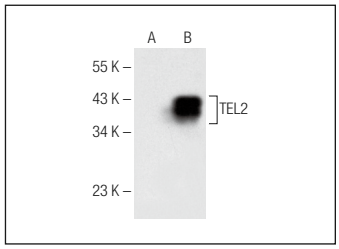
RECOMMENDED SUPPORT REAGENTS

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.

DATA



TEL2 (F-8): sc-376137. Western blot analysis of TEL2 expression in non-transfected: sc-117752 (**A**) and human TEL2 transfected: sc-115379 (**B**) 293T whole cell lysates.



TEL2 (E-1): sc-374478. Western blot analysis of TEL2 expression in non-transfected: sc-117752 (**A**) and human TEL2 transfected: sc-115379 (**B**) 293T whole cell lysates.

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.