SANTA CRUZ BIOTECHNOLOGY, INC.

TEL2 (L-12): sc-132467

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The Power to Question

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

1. 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.
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.
8. Carella, C., et al. 2006. The Ets factor TEL2 is a hematopoietic oncoprotein. Blood 107: 1124-1132.

CHROMOSOMAL LOCATION

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

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.

SOURCE

TEL2 (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TEL2 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-132467 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-132467 X, 200 µg/0.1 ml.

APPLICATIONS

TEL2 (L-12) is recommended for detection of TEL2 isoforms A, B, C, D, E, F and G of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with TEL.

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.

TEL2 (L-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TEL2 isoforms: 30/39 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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