

# TEL2 (F-8): sc-376137

## 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<sup>™</sup>. 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 K562 cells. *Int. J. Oncol.* 22: 1327-1333.
- Bocconi, 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.
- Cardone, M., et al. 2005. The novel Ets factor TEL2 cooperates with Myc in B lymphomagenesis. *Mol. Cell. Biol.* 25: 2395-2405.

## CHROMOSOMAL LOCATION

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

## SOURCE

TEL2 (F-8) is a mouse monoclonal antibody raised against amino acids 111-198 mapping within an internal region of TEL2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> 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-376137 X, 200 µg/0.1 ml.

## APPLICATIONS

TEL2 (F-8) is recommended for detection of TEL2 of 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 TEL2 siRNA (h): sc-95523, TEL2 shRNA Plasmid (h): sc-95523-SH and TEL2 shRNA (h) Lentiviral Particles: sc-95523-V.

TEL2 (F-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

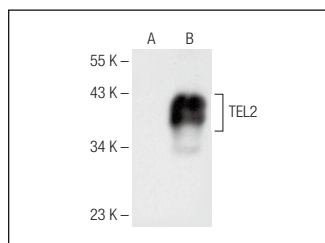
Molecular Weight of TEL2 isoforms: 30-39 kDa.

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

## 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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## 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.

## SELECT PRODUCT CITATIONS

- Alessandrini, F., et al. 2018. ETV7-mediated DNJC15 repression leads to doxorubicin resistance in breast cancer cells. *Neoplasia* 20: 857-870.

## 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.