# SANTA CRUZ BIOTECHNOLOGY, INC.

# BTEB1 (P-16): sc-12994



## BACKGROUND

Members of the C<sub>2</sub>H<sub>2</sub> zinc finger family bind GC-rich motifs widely distributed in gene promoters, resulting in distinct activation or repression of transcriptional activities. In addition to Sp1, Sp2, Sp3, and Sp4, the basic transcription element binding proteins-1 and -2 (BTEB1 and BTEB2, respectively), belong to this family of transcriptional regulators. BTEB1 regulates transcription by binding either a single GC-box or tandemly repeated GC-boxes within the promoter. Predominantly localized to the nuclei of endometrial luminal and glandular epithelial cells, BTEB1 expression is both acetaldehyde and UV inducible. BTEB1 plays a regulatory role in pregnancy-associated endometrial epithelial gene expression and also mediates JNK-dependent  $\alpha$  (I) collagen gene expression in hepatic stellate cells.

# CHROMOSOMAL LOCATION

Genetic locus: KLF9 (human) mapping to 9q21.12; Klf9 (mouse) mapping to 19 B.

## SOURCE

BTEB1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of BTEB1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g lgG 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-12994 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-12994 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **RESEARCH USE**

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

# APPLICATIONS

BTEB1 (P-16) is recommended for detection of BTEB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

BTEB1 (P-16) is also recommended for detection of BTEB1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BTEB1 siRNA (h): sc-37716, BTEB1 siRNA (m): sc-37717, BTEB1 shRNA Plasmid (h): sc-37716-SH, BTEB1 shRNA Plasmid (m): sc-37717-SH, BTEB1 shRNA (h) Lentiviral Particles: sc-37716-V and BTEB1 shRNA (m) Lentiviral Particles: sc-37717-V.

BTEB1 (P-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BTEB1: 32 kDa.

Positive Controls: mouse prostate tissue: sc-364249, HeLa whole cell lysate: sc-2200 or Caki-1 cell lysate: sc-2224.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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). 3) 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<sup>™</sup> Mounting Medium: sc-24941.

### DATA





BTEB1 (P-16): sc-12994. Western blot analysis of BTEB1 expression in mouse prostate tissue extract.

BTEB1 (P-16): sc-12994. Immunofluorescence staining of methanol-fixed Caki-1 cells showing nuclear localization.

#### SELECT PRODUCT CITATIONS

- 1. Ishimaru, N., et al. 2006. Regulation of neurotrophin-3 gene transcription by Sp3 and Sp4 in neurons. J. Neurochem. 100: 520-531.
- 2. Velarde, M.C., et al. 2007. Krüppel-like factor 9 is a negative regulator of ligand-dependent estrogen receptor  $\alpha$  signaling in Ishikawa endometrial adenocarcinoma cells. Mol. Endocrinol. 21: 2988-3001.
- Pabona, J.M., et al. 2012. Krüppel-like factor 9 and progesterone receptor coregulation of decidualizing endometrial stromal cells: implications for the pathogenesis of endometriosis. J. Clin. Endocrinol. Metab. 97: E376-E392.

#### **STORAGE**

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

#### **PROTOCOLS**

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

# MONOS Satisfation

Guaranteed

Try **BTEB1 (A-5): sc-376422** or **BTEB1 (E-8): sc-376423**, our highly recommended monoclonal alternatives to BTEB1 (P-16).