

## BTEB1 (C-17): sc-12996

### 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.

### REFERENCES

1. Kikuchi, Y., et al. 1996. Purification and characterization of the DNA-binding domain of BTEB, a GC box-binding transcription factor, expressed in *Escherichia coli*. J. Biochem. 119: 309-313.
2. Wang, Y., et al. 1997. Cell-type expression, immunolocalization, and deoxyribonucleic acid-binding activity of basic transcription element binding transcription factor, an Sp-related family member, in porcine endometrium of pregnancy. Biol. Reprod. 57: 707-714.
3. Lania, L., et al. 1997. Transcriptional regulation by the Sp family proteins. Int. J. Biochem. Cell Biol. 29: 1313-1323.
4. Simmen, R.C., et al. 1999. Trans-activation functions of the Sp-related nuclear factor, basic transcription element-binding protein, and progesterone receptor in endometrial epithelial cells. Endocrinology 140: 2517-2525.

### CHROMOSOMAL LOCATION

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

### SOURCE

BTEB1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BTEB1 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG 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-12996 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-12996 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### 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.

### APPLICATIONS

BTEB1 (C-17) 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 (C-17) is also recommended for detection of BTEB1 in additional species, including equine, canine, bovine and porcine.

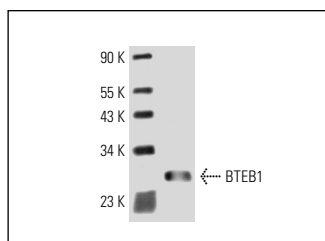
Suitable for use as control antibody for BTEB1 siRNA (h): sc-37716, BTEB1 siRNA (m): sc-37717, BTEB1 shRNA Plasmid (h): sc-37716-SH, BTEB1 shRNA Plasmid (m): sc-37717-SH, BTEB1 shRNA (h) Lentiviral Particles: sc-37716-V and BTEB1 shRNA (m) Lentiviral Particles: sc-37717-V.

BTEB1 (C-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BTEB1: 32 kDa.

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

### DATA



BTEB1 (C-17): sc-12996. Western blot analysis of BTEB1 expression in mouse prostate tissue extract.

### SELECT PRODUCT CITATIONS

1. Velarde, M.C., et al. 2006. Progesterone receptor transactivation of the secretory leukocyte protease inhibitor gene in Ishikawa endometrial epithelial cells involves recruitment of Krüppel-like factor 9/basic transcription element binding protein-1. Endocrinology 147: 1969-1978.
2. Ohguchi, H., et al. 2008. Hepatocyte nuclear factor 4 $\alpha$  contributes to thyroid hormone homeostasis by cooperatively regulating the type 1 iodothyronine deiodinase gene with GATA-4 and Krüppel-like transcription factor 9. Mol. Cell. Biol. 28: 3917-3931.
3. Du, H., et al. 2010. HOXA10 inhibits Krüppel-like factor 9 expression in the human endometrial epithelium. Biol. Reprod. 83: 205-211.

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Try **BTEB1 (A-5): sc-376422** or **BTEB1 (E-8): sc-376423**, our highly recommended monoclonal alternatives to BTEB1 (C-17).