

BTEB2 (m2): 293T Lysate: sc-118867

BACKGROUND

Members of the C₂H₂ 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. BTEB2 binds the GC-box of DNA and is expressed in fetal aorta. BTEB2 is a target for Egr-1. Expression of BTEB2 is activated by mitogen-activated protein kinase pathways. BTEB2 expression is induced in the neointima in response to vascular injury and is involved in phenotypic modulation of vascular smooth muscle cells in response to mitogen stimulation through Egr-1.

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. Kawai-Kowase, K., et al. 1999. Transcriptional activation of the zinc finger transcription factor BTEB2 gene by Egr-1 through mitogen-activated protein kinase pathways in vascular smooth muscle cells. *Circ. Res.* 85: 787-795.
5. Nagai, R., et al. 2000. Transcriptional regulation of smooth muscle phenotypic modulation. *Ann. N.Y. Acad. Sci.* 902: 214-222.
6. Ogata, T., et al. 2000. Inducible expression of basic transcription element-binding protein 2 in proliferating smooth muscle cells at the vascular anastomotic stricture. *J. Thorac. Cardiovasc. Surg.* 119: 983-989.

CHROMOSOMAL LOCATION

Genetic locus: Klf5 (mouse) mapping to 14 E2.2.

PRODUCT

BTEB2 (m2): 293T Lysate represents a lysate of mouse BTEB2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

BTEB2 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive BTEB2 antibodies. Recommended use: 10-20 µl per lane.

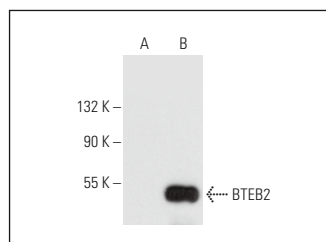
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BTEB2 (A-5): sc-398014 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse BTEB2 expression in BTEB2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

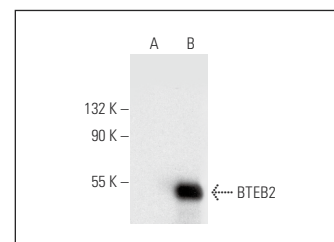
RECOMMENDED SUPPORT REAGENTS

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



BTEB2 (A-5): sc-398014. Western blot analysis of BTEB2 expression in non-transfected: sc-117752 (A) and mouse BTEB2 transfected: sc-118867 (B) 293T whole cell lysates.



BTEB2 (G-7): sc-398470. Western blot analysis of BTEB2 expression in non-transfected: sc-117752 (A) and mouse BTEB2 transfected: sc-118867 (B) 293T whole cell lysates.

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.

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.