

# TEF-5 (L-17): sc-102130

## BACKGROUND

The transcriptional enhancer factor (TEF)/TEAD family of proteins includes TEF-1, TEF-3, TEF-4 and TEF-5, all of which share a highly conserved 68 amino acid TEA/ATTS DNA-binding domain. TEF-5 (transcriptional enhancer factor-5), also known as TEAD3, TEAD5, DTEF-1 or ETRF-1, is a 435 amino acid nuclear protein that contains one TEA DNA-binding domain and belongs to the TEF transcriptional enhancer family. Expressed predominately in placental tissue and skeletal muscle, TEF-5 binds to multiple sites in the promotor of Placental lactogen II (also known as chorionic somatomammotropin-B) and, via this binding, enhances Placental lactogen II transcription. Due to its ability to enhance the expression of placenta-related genes, TEF-5 is thought to function as an important regulatory protein within the human placenta.

## REFERENCES

1. Yasunami, M., et al. 1996. A novel family of TEA domain-containing transcription factors with distinct spatiotemporal expression patterns. *Biochem. Biophys. Res. Commun.* 228: 365-370.
2. Azakie, A., et al. 1996. DTEF-1, a novel member of the transcription enhancer factor-1 (TEF-1) multigene family. *J. Biol. Chem.* 271: 8260-8265.
3. Jacquemin, P., et al. 1997. Human TEF-5 is preferentially expressed in placenta and binds to multiple functional elements of the human chorionic somatomammotropin-B gene enhancer. *J. Biol. Chem.* 272: 12928-12937.
4. Jacquemin, P., et al. 1998. Differential expression of the TEF family of transcription factors in the murine placenta and during differentiation of primary human trophoblasts *in vitro*. *Dev. Dyn.* 212: 423-436.
5. Jiang, S.W., et al. 1999. Human placental TEF-5 transactivates the human chorionic somatomammotropin gene enhancer. *Mol. Endocrinol.* 13: 879-889.
6. Maeda, T., et al. 2002. TEF-1 transcription factors regulate activity of the mouse mammary tumor virus LTR. *Biochem. Biophys. Res. Commun.* 296: 1279-1285.
7. Maeda, T., et al. 2002. Mouse DTEF-1 (ETFR-1, TEF-5) is a transcriptional activator in  $\alpha$ 1-adrenergic agonist-stimulated cardiac myocytes. *J. Biol. Chem.* 277: 24346-24352.

## CHROMOSOMAL LOCATION

Genetic locus: TEAD3 (human) mapping to 6p21.31; Tead3 (mouse) mapping to 17 A3.3.

## SOURCE

TEF-5 (L-17) is a purified rabbit polyclonal antibody raised against TEF-5 of human origin.

## 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.

## PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

TEF-5 (L-17) is recommended for detection of TEF-5 of mouse, rat, human and dog 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), immunohistochemistry (including paraffin-embedded sections) (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 TEF-5 siRNA (h): sc-95636, TEF-5 siRNA (m): sc-154180, TEF-5 shRNA Plasmid (h): sc-95636-SH, TEF-5 shRNA Plasmid (m): sc-154180-SH, TEF-5 shRNA (h) Lentiviral Particles: sc-95636-V and TEF-5 shRNA (m) Lentiviral Particles: sc-154180-V.

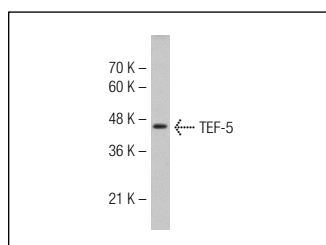
Molecular Weight of TEF-5: 53 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



TEF-5 (L-17): sc-102130. Western blot analysis of TEF-5 expression in Hep G2 whole cell lysate.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.