

TEF-3 (W-21): sc-134071

BACKGROUND

TEF-3, also known as TEAD4 (TEA domain family member 4), RTEF-1, EFTR-2, TEFR-1, TCF13L1 or hRTEF-1B, is a 427 amino acid member of the transcriptional enhancer factor (TEF) family of proteins that are characterized by the presence of a TEA DNA-binding domain. Localized to the nucleus and expressed primarily in skeletal muscle, TEF-3 functions as a transcriptional regulator by binding specifically and non-cooperatively to the M-CAT motif found in the promoters of muscle-specific genes, thereby directing their subsequent expression. TEF-3 contains one TEA DNA-binding domain and is expressed as multiple isoforms due to alternative splicing events.

REFERENCES

1. Stewart, A.F., et al. 1996. Cloning of human RTEF-1, a transcriptional enhancer factor-1-related gene preferentially expressed in skeletal muscle: evidence for an ancient multigene family. *Genomics* 37: 68-76.
2. Hsu, D.K., et al. 1996. Identification of a murine TEF-1-related gene expressed after mitogenic stimulation of quiescent fibroblasts and during myogenic differentiation. *J. Biol. Chem.* 271: 13786-13795.
3. Jacquemin, P., et al. 1996. A novel family of developmentally regulated mammalian transcription factors containing the TEA/ATTS DNA binding domain. *J. Biol. Chem.* 271: 21775-21785.
4. Vassilev, A., et al. 2001. TEAD/TEF transcription factors utilize the activation domain of YAP65, a Src/Yes-associated protein localized in the cytoplasm. *Genes Dev.* 15: 1229-1241.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601714. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Chen, H.H., et al. 2004. Transcription enhancer factor-1-related factor-transgenic mice develop cardiac conduction defects associated with altered connexin phosphorylation. *Circulation* 110: 2980-2987.
7. Yagi, R., et al. 2007. Transcription factor TEAD4 specifies the trophectoderm lineage at the beginning of mammalian development. *Development* 134: 3827-3836.

CHROMOSOMAL LOCATION

Genetic locus: TEAD4 (human) mapping to 12p13.33; Tead4 (mouse) mapping to 6 F3.

SOURCE

TEF-3 (W-21) is an affinity purified rabbit polyclonal antibody raised against synthetic TEF-3 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

TEF-3 (W-21) is recommended for detection of TEF-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TEF-3 siRNA (h): sc-96187, TEF-3 siRNA (m): sc-154179, TEF-3 shRNA Plasmid (h): sc-96187-SH, TEF-3 shRNA Plasmid (m): sc-154179-SH, TEF-3 shRNA (h) Lentiviral Particles: sc-96187-V and TEF-3 shRNA (m) Lentiviral Particles: sc-154179-V.

Molecular Weight (predicted) of TEF-3: 48 kDa.

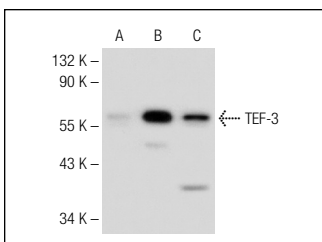
Molecular Weight (observed) of TEF-3: 55 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or TEF-3 (h): 293 Lysate: sc-113218.

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).

DATA



TEF-3 (W-21): sc-134071. Western blot analysis of TEF-3 expression in non-transfected: sc-110760 (A) and human TEF-3 transfected: sc-113218 (B) 293 whole cell lysates and HeLa nuclear extract (C).

RESEARCH USE

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



Try **TEF-3 (B-5): sc-390578** or **TEF-3 (N-G2): sc-101184**, our highly recommended monoclonal alternatives to TEF-3 (W-21).