

TEF-3 (S-14): sc-109082

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 (mouse) mapping to 6 F3.

SOURCE

TEF-3 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TEF-3 of mouse origin.

PRODUCT

Each vial contains 200 µg 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-109082 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-109082 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TEF-3 (S-14) is recommended for detection of TEF-3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other TEF family members.

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

TEF-3 (S-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

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

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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



Try **TEF-3 (N-G2): sc-101184**, our highly recommended monoclonal alternative to TEF-3 (S-14).