SANTA CRUZ BIOTECHNOLOGY, INC.

TEF (I-16): sc-86905

BACKGROUND

TEF (thyrotrophic embryonic factor), also known as KIAA1655, is a 303 amino acid nuclear transcription factor that belongs to the bZIP (basic region/leucine zipper) family and PAR (proline and acidic amino acid-rich) subfamily. TEF binds DNA as either a homodimer or heterodimer, and is known to transactivate the TSHβ promoter. While broadly expressed in adults, TEF is only found in developing embryonic anterior pituitary gland. TEF accumulates according to a robust circadian rhythm and has also been found to inhibit cell growth by downregulating β chain expression of cytokine receptors. The functional domains of TEF are highly homologous with other members of the PAR-bZIP subfamily, including albumin D box-binding protein (DABP), human hepatic leukemia factor (HLF) and chicken vitellogenin gene-binding protein (VBP). The gene encoding TEF maps to human chromosome 22q13.2.

REFERENCES

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3. Khatib, Z.A., et al. 1994. Chromosomal localization and cDNA cloning of the human DBP and TEF genes. Genomics 23: 344-351.
4. Krueger, D.A., et al. 2000. Involvement of thyrotroph embryonic factor in calcium-mediated regulation of gene expression. J. Biol. Chem. 275: 14524-14531.
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8. Inukai, T., et al. 2005. TEF, an antiapoptotic bZIP transcription factor related to the oncogenic E2A-HLF chimera, inhibits cell growth by downregulating expression of the common β chain of cytokine receptors. Blood 105: 4437-4444.

CHROMOSOMAL LOCATION

Genetic locus: TEF (human) mapping to 22q13.2; Tef (mouse) mapping to 15 E1.

SOURCE

TEF (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TEF of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86905 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TEF (I-16) is recommended for detection of TEF of mouse, rat and human 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).

Suitable for use as control antibody for TEF siRNA (h): sc-106607, TEF siRNA (m): sc-154177, TEF shRNA Plasmid (h): sc-106607-SH, TEF shRNA Plasmid (m): sc-154177-SH, TEF shRNA (h) Lentiviral Particles: sc-106607-V and TEF shRNA (m) Lentiviral Particles: sc-154177-V.

Molecular Weight of TEF: 33 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.

PROTOCOLS

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