SANTA CRUZ BIOTECHNOLOGY, INC.

TEF-3 (N-G2): sc-101184

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 promotors 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.

CHROMOSOMAL LOCATION

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

SOURCE

TEF-3 (N-G2) is a mouse monoclonal antibody raised against recombinant TEF-3 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TEF-3 (N-G2) 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 whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or SW480 cell lysate: sc-2219.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

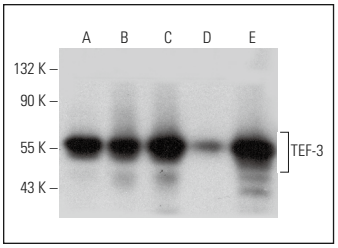
STORAGE

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.

DATA



TEF-3 (N-G2): sc-101184. Western blot analysis of TEF-3 expression in HeLa (**A**), Hep G2 (**B**), SW480 (**C**), MCF7 (**D**) and JEG-3 (**E**) whole cell lysates.

SELECT PRODUCT CITATIONS

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3. Ozeki, N., et al. 2016. Bone morphogenetic protein-induced cell differentiation involves Atg7 and Wnt16 sequentially in human stem cell-derived osteoblastic cells. Exp. Cell Res. 347: 24-41.
4. Fontanals-Cirera, B., et al. 2017. Harnessing BET inhibitor sensitivity reveals AMIGO2 as a melanoma survival gene. Mol. Cell 68: 731-744.e9.
5. Jiao, S., et al. 2018. Targeting IRF3 as a YAP agonist therapy against gastric cancer. J. Exp. Med. 215: 699-718.
6. He, X., et al. 2018. A histone deacetylase 3-dependent pathway delimits peripheral myelin growth and functional regeneration. Nat. Med. 24: 338-351.
7. Tome-Garcia, J., et al. 2018. Analysis of chromatin accessibility uncovers TEAD1 as a regulator of migration in human glioblastoma. Nat. Commun. 9: 4020.
8. Chang, L., et al. 2018. The SWI/SNF complex is a mechanoregulated inhibitor of YAP and TAZ. Nature 563: 265-269.
9. Fu, L., et al. 2019. Up-regulation of FOXD1 by YAP alleviates senescence and osteoarthritis. PLoS Biol. 17: e3000201.
10. Tocci, P., et al. 2019. β-arrestin1/YAP/mutant p53 complexes orchestrate the endothelin A receptor signaling in high-grade serous ovarian cancer. Nat. Commun. 10: 3196.

PROTOCOLS

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