

TMEFF1 (K-18): sc-30862



The Power to Question

BACKGROUND

TMEFF1 and TMEFF2 are putative transmembrane proteins comprised of one epidermal growth factor (EGF)-like domain and two follistatin-like domains. Both TMEFF1 and TMEFF2 are members of the EGF-like protein family and are predominantly expressed in the brain. The structure of TMEFF1 is that of a transmembrane protein with a highly conserved cytoplasmic tail, two follistatin domains and one modified EGF domain in its extracellular region. TMEFF1 is expressed on the cell membrane, and may behave as a tumor suppressor gene in brain cancers. It inhibits Nodal but not Activin signaling by binding to Cripto, the nodal co-receptor, and is also involved in the regulation of BMPs.

REFERENCES

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2. Morais da Silva, S., Gates, P.B., Eib, D.W., Martens, G.J. and Brockes, J.P. 2001. The expression pattern of tomoregulin-1 in urodele limb regeneration and mouse limb development. *Mech. Dev.* 104: 125-128.
3. Harms, P.W. and Chang, C. 2003. Tomoregulin-1 (TMEFF1) inhibits Nodal signaling through direct binding to the Nodal co-receptor Cripto. *Genes Dev.* 17: 2624-2629.
4. Gery, S., Yin, D., Xie, D., Black, K.L. and Koeffler, H.P. 2003. TMEFF1 and brain tumors. *Oncogene* 22: 2723-2727.
5. Chang, C., Eggen, B.J., Weinstein, D.C. and Brivanlou, A.H. 2003. Regulation of Nodal and BMP signaling by tomoregulin-1 (X7365) through novel mechanisms. *Dev. Biol.* 255: 1-11.
6. Ge, W., Hu, H., Ding, K., Sun, L. and Zheng, S. 2006. Protein interaction analysis of ST14 domains and their point and deletion mutants. *J. Biol. Chem.* 281: 7406-7412.

CHROMOSOMAL LOCATION

Genetic locus: TMEFF1 (human) mapping to 9q31.1; Tmeff1 (mouse) mapping to 4 B1.

SOURCE

TMEFF1 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMEFF1 of human origin.

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-30862 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TMEFF1 (K-18) is recommended for detection of TMEFF1 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).

TMEFF1 (K-18) is also recommended for detection of TMEFF1 in additional species, including canine and bovine.

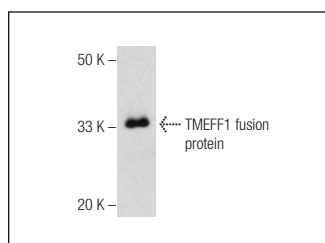
Suitable for use as control antibody for TMEFF1 siRNA (h): sc-45762, TMEFF1 siRNA (m): sc-45763, TMEFF1 shRNA Plasmid (h): sc-45762-SH, TMEFF1 shRNA Plasmid (m): sc-45763-SH, TMEFF1 shRNA (h) Lentiviral Particles: sc-45762-V and TMEFF1 shRNA (m) Lentiviral Particles: sc-45763-V.

Molecular Weight of TMEFF1: 41 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.

DATA



TMEFF1 (K-18): sc-30862. Western blot analysis of human recombinant TMEFF1 fusion protein.

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 **TMEFF1 (B-4): sc-393457** or **TMEFF1 (H-11): sc-393005**, our highly recommended monoclonal alternatives to TMEFF1 (K-18).