

TMEFF1 (C-16): sc-30864

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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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 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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-30864 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 (C-16) 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 (C-16) is also recommended for detection of TMEFF1 in additional species, including canine, bovine and avian.

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.

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.