SANTA CRUZ BIOTECHNOLOGY, INC.

TMEFF1 (H-57): sc-98956

SANTA CRUZ BIOTECHNOLOGY

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

1. Kanemoto, N., et al. 2001. Expression of TMEFF1 mRNA in the mouse central nervous system: precise examination and comparative studies of TMEFF1 and TMEFF2. Brain Res. Mol. Brain Res. 86: 48-55.
2. Morais da Silva, S., et al. The expression pattern of tomoregulin-1 in urodele limb regeneration and mouse limb development. Mech. Dev. 104: 125-128.

CHROMOSOMAL LOCATION

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

SOURCE

TMEFF1 (H-57) is a rabbit polyclonal antibody raised against amino acids 204-260 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.

APPLICATIONS

TMEFF1 (H-57) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (H-57) is also recommended for detection of TMEFF1 in additional species, including equine, canine, bovine and porcine.

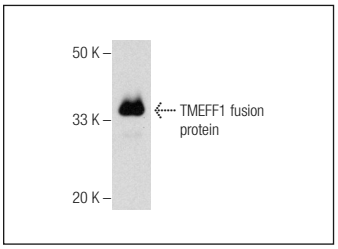
Suitable for use as control antibody for TMEFF1 siRNA (h): sc-45762, TMEFF1 siRNA (m): sc-45763, TMEFF1 shRNA Plasmid (h): sc-45762-SH, TMEFF1 shRNA Plasmid (m): sc-45763-SH, TMEFF1 shRNA (h) Lentiviral Particles: sc-45762-V and TMEFF1 shRNA (m) Lentiviral Particles: sc-45763-V.

Molecular Weight of TMEFF1: 41 kDa.

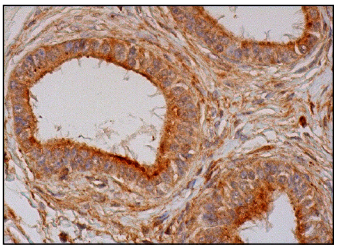
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TMEFF1 (H-57): sc-98956. Western blot analysis of human recombinant TMEFF1 fusion protein.



TMEFF1 (H-57): sc-98956. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing apical membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Matise, L.A., et al. 2012. Lack of transforming growth factor-β signaling promotes collective cancer cell invasion through tumor-stromal crosstalk. Breast Cancer Res. 14: R98.

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.