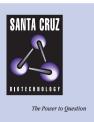
# SANTA CRUZ BIOTECHNOLOGY, INC.

# TMTSP (T-20): sc-69051



BACKGROUND

TMTSP (transmembrane molecule with Thrombospondin module), also known as THSD1 (Thrombospondin type-1 domain-containing protein 1), is an 852 amino acid protein expressed in endothelial cells and hematopoietic cells. Three isoforms of TMTSP are produced by alternative splicing events. Isoforms 1 and 2 are single-pass type I membrane proteins while isoform 3 is a secreted protein. TMTSP contains three immunoglobulin-like domains and one Thrombospondin domain. Thrombospondin domains have been associated with cell migration and are found in a variety of different proteins, including extracellular matrix proteins, thromobospondins and complement pathway proteins.

# REFERENCES

- Bork, P. 1993. The modular architecture of a new family of growth regulators related to connective tissue growth factor. FEBS Lett. 327: 125-130.
- Clark, H.F., et al. 2003. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. Genome Res. 13: 2265-2270.
- Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
- Orr, A.W., et al. 2004. Thrombospondin induces RhoA inactivation through FAK-dependent signaling to stimulate focal adhesion disassembly. J. Biol. Chem. 279: 48983-48992.
- Takayanagi, S., et al. 2006. Genetic marking of hematopoietic stem and endothelial cells: identification of the Tmtsp gene encoding a novel cell surface protein with the Thrombospondin-1 domain. Blood. 107: 4317-4325.
- Kis, E., et al. 2006. Microarray analysis of radiation response genes in primary human fibroblasts. Int. J. Radiat. Oncol. Biol. Phys. 66: 1506-1514.
- 7. Gruber, H.E. and Ingram, J.A. 2006. Immunolocalization of Thrombospondin in the human and sand rat intervertebral disc. Spine. 31: 2556-2561.

#### CHROMOSOMAL LOCATION

Genetic locus: Thsd1 (mouse) mapping to 8 A3.

#### SOURCE

TMTSP (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TMTSP of mouse origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69051 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

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

# APPLICATIONS

TMTSP (T-20) is recommended for detection of Thrombospondin type-1 domain-containing protein 1 precursor of mouse and rat 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 TMTSP siRNA (m): sc-63140, TMTSP shRNA Plasmid (m): sc-63140-SH and TMTSP shRNA (m) Lentiviral Particles: sc-63140-V.

Molecular Weight of TMTSP: 95 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) Immunofluo-rescence: 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.