

# CMTM4 (S-14): sc-107493

## BACKGROUND

CMTM4 (CKLF-like MARVEL transmembrane domain containing 4), also known as CKLFSF4 (chemokine-like factor superfamily member 4), is a 234 amino acid member of the chemokine-like factor family. Members of the chemokine-like factor family share similarity with the chemokine and the transmembrane 4 superfamilies. The chemokine-like factor family is further divided into subfamilies. CMTM4 belongs to a subfamily with CMTM6 and the two proteins are 31.1% identical at the level of amino acids. In addition, CMTM4 shares 97.6% similarity with its mouse homolog. Predominantly expressed in testis and prostate, CMTM4 is a multi-pass membrane protein containing one MARVEL domain. Three CMTM4 isoforms are expressed due to alternative splicing events.

## REFERENCES

1. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607887. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Han, W., Ding, P., Xu, M., Wang, L., Rui, M., Shi, S., Liu, Y., Zheng, Y., Chen, Y., Yang, T. and Ma, D. 2003. Identification of eight genes encoding chemokine-like factor superfamily members 1-8 (CKLFSF1-8) by in silico cloning and experimental validation. *Genomics* 81: 609-617.
3. Kittler, R., Putz, G., Pelletier, L., Poser, I., Heninger, A.K., Drechsel, D., Fischer, S., Konstantinova, I., Habermann, B., Grabner, H., Yaspo, M.L., Himmelbauer, H., Korn, B., Neugebauer, K., Pisabarro, M.T. and Buchholz, F. 2004. An endoribonuclease-prepared siRNA screen in human cells identifies genes essential for cell division. *Nature* 432: 1036-1040.
4. Li, T., Guo, X.H., Wang, Y., Markus, P., Shao, L.N., Song, Q.S., Ma, D.L. and Han, W.L. 2008. Preparation, purification and characterization of the polyclonal antibody against human CMTM4. *Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi* 24: 41-44.

## CHROMOSOMAL LOCATION

Genetic locus: CMTM4 (human) mapping to 16q21; Cmtm4 (mouse) mapping to 8 D3.

## SOURCE

CMTM4 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CMTM4 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-107493 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

CMTM4 (S-14) is recommended for detection of CMTM4 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).

CMTM4 (S-14) is also recommended for detection of CMTM4 in additional species, including bovine.

Suitable for use as control antibody for CMTM4 siRNA (h): sc-93122, CMTM4 siRNA (m): sc-142421, CMTM4 shRNA Plasmid (h): sc-93122-SH, CMTM4 shRNA Plasmid (m): sc-142421-SH, CMTM4 shRNA (h) Lentiviral Particles: sc-93122-V and CMTM4 shRNA (m) Lentiviral Particles: sc-142421-V.

Molecular Weight of CMTM4: 26 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CMTM4 (1E8): sc-81942**, our highly recommended monoclonal alternative to CMTM4 (S-14).