SANTA CRUZ BIOTECHNOLOGY, INC.

CMTM4 (1E8): sc-81942

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 sub-families. 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™. 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 (1E8) is a mouse monoclonal antibody raised against recombinant CMTM4 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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 for detailed protocols and support products.

APPLICATIONS

CMTM4 (1E8) is recommended for detection of CMTM4 of mouse 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

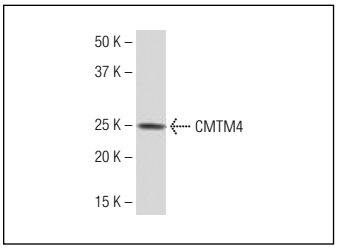
Molecular Weight of CMTM4: 26 kDa.

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



CMTM4 (1E8): sc-81942. Western blot analysis of CMTM4 expression in HeLa whole cell lysate.

RESEARCH USE

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