

# CMTM7 (N-15): sc-99353

## BACKGROUND

CMTM7 (CKLF-like MARVEL transmembrane domain-containing protein 7), also known as CKLFSF7 (chemokine-like factor superfamily member 7), is a 175 amino acid member of the chemokine-like factor superfamily. Highly expressed in leukocytes and localized to the membrane, CMTM7 is a multi-pass protein that contains one MARVEL domain and may be involved in signaling pathways. CMTM7 has four transmembrane domains and shares 89% similarity with its mouse homolog. Different isoforms of CMTM7 exist due to alternative splicing events.

## REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607890. 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. Sugimoto, N., Oida, T., Hirota, K., Nakamura, K., Nomura, T., Uchiyama, T. and Sakaguchi, S. 2006. Foxp3-dependent and -independent molecules specific for CD25<sup>+</sup>CD4<sup>+</sup> natural regulatory T cells revealed by DNA microarray analysis. *Int. Immunol.* 18: 1197-1209.
4. Zhong, J., Wang, Y., Qiu, X., Mo, X., Liu, Y., Li, T., Song, Q., Ma, D. and Han, W. 2006. Characterization and expression profile of CMTM3/CKLFSF3. *J. Biochem. Mol. Biol.* 39: 537-545.
5. LocusLink Report (LocusID: 112616). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: CMTM7 (human) mapping to 3p22.3; Cmtm7 (mouse) mapping to 9 F3.

## SOURCE

CMTM7 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CMTM7 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-99353 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

CMTM7 (N-15) is recommended for detection of CMTM7 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CMTM family members.

CMTM7 (N-15) is also recommended for detection of CMTM7 in additional species, including bovine and porcine.

Suitable for use as control antibody for CMTM7 siRNA (h): sc-77991, CMTM7 siRNA (m): sc-142424, CMTM7 shRNA Plasmid (h): sc-77991-SH, CMTM7 shRNA Plasmid (m): sc-142424-SH, CMTM7 shRNA (h) Lentiviral Particles: sc-77991-V and CMTM7 shRNA (m) Lentiviral Particles: sc-142424-V.

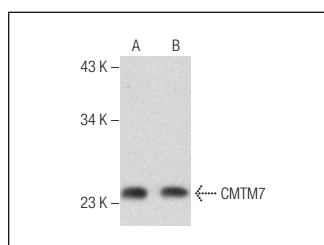
Molecular Weight of CMTM7: 19 kDa.

Positive Controls: Ramos cell lysate: sc-2216 or CCRF-CEM cell lysate: sc-2225.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



CMTM7 (N-15): sc-99353. Western blot analysis of CMTM7 expression in Ramos (A) and CCRF-CEM (B) whole cell lysates.

## RESEARCH USE

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