

# CMTM5 (A-11): sc-374206

## BACKGROUND

CMTM (chemokine-like factor super family) is a novel family of proteins linking chemokines and members of the transmembrane 4 super family (TM4SF). CMTM5 (chemokine-like factor superfamily member 5), also known as CKLF-like MARVEL transmembrane domain containing 5, CKLFSF5 or FLJ37521, is a 223 amino acid multi-pass membrane protein and potential tumor suppressor belonging to the chemokine-like factor family. CMTM5 is highly expressed in brain and contains one MARVEL domain. CMTM5 induces apoptosis of multiple carcinoma cells through a caspase-dependent pathway. Alternative splicing events produce five CMTM5 isoforms; the major variant, termed CMTM5-v1, contains 156 amino acids and is broadly expressed in human fetal and adult tissues, but is undetectable in the majority carcinoma cell lines. The gene encoding CMTM5 maps to human chromosome 14q11.2, a locus associated with multiple cancers.

## REFERENCES

1. Raport, C.J., et al. 1996. New members of the chemokine receptor gene family. *J. Leukoc. Biol.* 59: 18-23.
2. Han, W., et al. 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. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607888. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: CMTM5 (human) mapping to 14q11.2; Cmtm5 (mouse) mapping to 14 C3.

## SOURCE

CMTM5 (A-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 199-221 at the C-terminus of CMTM5 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CMTM5 (A-11) is available conjugated to agarose (sc-374206 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374206 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374206 PE), fluorescein (sc-374206 FITC), Alexa Fluor® 488 (sc-374206 AF488), Alexa Fluor® 546 (sc-374206 AF546), Alexa Fluor® 594 (sc-374206 AF594) or Alexa Fluor® 647 (sc-374206 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374206 AF680) or Alexa Fluor® 790 (sc-374206 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374206 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

CMTM5 (A-11) is recommended for detection of CMTM5 isoforms 1-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for CMTM5 siRNA (h): sc-92390, CMTM5 siRNA (m): sc-142422, CMTM5 shRNA Plasmid (h): sc-92390-SH, CMTM5 shRNA Plasmid (m): sc-142422-SH, CMTM5 shRNA (h) Lentiviral Particles: sc-92390-V and CMTM5 shRNA (m) Lentiviral Particles: sc-142422-V.

Molecular Weight of CMTM5: 24 kDa.

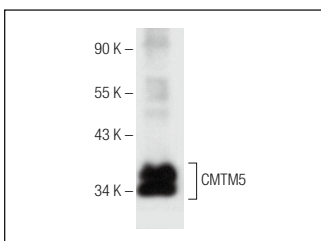
Positive Controls: human platelet extract: sc-363773.

## RECOMMENDED SUPPORT REAGENTS

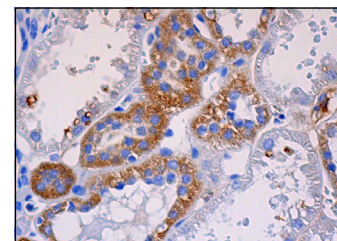
To ensure optimal results, the following support reagents are recommended:

- 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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



CMTM5 (A-11): sc-374206. Western blot analysis of CMTM5 expression in human platelet extract.



CMTM5 (A-11): sc-374206. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of subset of cells in tubules.

## 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.