

# MAMDC2 (C-12): sc-138978

## BACKGROUND

MAM (meprin/A5-protein/PTP) domains are found in a variety of proteins and have been characterized as homophilic binding sites which promote PTP dimerization at the cell surface. MAMDC2 (MAM domain containing 2), also known as MAM domain-containing proteoglycan (Mamcan) is a 686 amino acid secreted protein that localizes to extracellular matrix. Containing four MAM domains and existing as two alternatively spliced isoforms, MAMDC2 is encoded by a gene located on human chromosome 9q21.11. Chromosome 9 consists of about 145 million bases, 4% of the human genome and encodes nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, Familial dysautonomia and certain leukemias are also associated with chromosome 9.

## REFERENCES

- Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
- Cismasiu, V.B., et al. 2004. The MAM (meprin/A5-protein/PTPmu) domain is a homophilic binding site promoting the lateral dimerization of receptor-like protein-tyrosine phosphatase  $\mu$ . *J. Biol. Chem.* 279: 26922-26931.
- Coppo, P., et al. 2006. BCR-ABL activates Stat3 via JAK and MEK pathways in human cells. *Br. J. Haematol.* 134: 171-179.
- Zheng, X., et al. 2006. BCR and its mutants, the reciprocal t(9;22)-associated ABL/BCR fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 7: 262.
- Burmeister, T., et al. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
- Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). *Respiration* 74: 361-378.
- Fernandez-L, A., et al. 2007. Gene expression fingerprinting for human hereditary hemorrhagic telangiectasia. *Hum. Mol. Genet.* 16: 1515-1533.

## CHROMOSOMAL LOCATION

Genetic locus: MAMDC2 (human) mapping to 9q21.11; Mamdc2 (mouse) mapping to 19 B.

## SOURCE

MAMDC2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MAMDC2 of human 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-138978 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

MAMDC2 (C-12) is recommended for detection of MAMDC2 isoforms 1 and 2 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); non cross-reactive with MAMDC4.

Suitable for use as control antibody for MAMDC2 siRNA (h): sc-92464, MAMDC2 siRNA (m): sc-149239, MAMDC2 shRNA Plasmid (h): sc-92464-SH, MAMDC2 shRNA Plasmid (m): sc-149239-SH, MAMDC2 shRNA (h) Lentiviral Particles: sc-92464-V and MAMDC2 shRNA (m) Lentiviral Particles: sc-149239-V.

Molecular Weight of MAMDC2: 78 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) 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.

## 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.