

MT-MMP-2 (C-20): sc-8844

BACKGROUND

The matrix metalloproteinases (MMP) are a family of peptidase enzymes responsible for the degradation of extracellular matrix components, including collagen, gelatin, Fibronectin, Laminin and proteoglycan. Transcription of MMP genes is differentially activated by phorbol ester, lipopolysaccharide (LPS) or staphylococcal enterotoxin B (SEB). MMP catalysis requires both calcium and zinc. Membrane-type matrix metalloproteinases, including MT-MMP-1, MT-MMP-2, MT-MMP-3 and MT-MMP-4, are type I membrane proteins that function to activate other MMPs. MT-MMP activation appears to be mediated by members of the proprotein convertase family, suggesting that a proprotein convertase/MT-MMP/MMP cascade may be involved in the regulation of ECM turnover. MT-MMP-2, also designated MMP-15, is a 669 amino acid protein that is preferentially synthesized in testis, liver, intestine, colon and placenta.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MMP15 (human) mapping to 16q12; Mmp15 (mouse) mapping to 8 D1.

RESEARCH USE

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

SOURCE

MT-MMP-2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MT-MMP-2 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-8844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MT-MMP-2 (C-20) is recommended for detection of MT-MMP-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).

MT-MMP-2 (C-20) is also recommended for detection of MT-MMP-2 in additional species, including canine.

Suitable for use as control antibody for MT-MMP-2 siRNA (h): sc-41567, MT-MMP-2 siRNA (m): sc-41568, MT-MMP-2 shRNA Plasmid (h): sc-41567-SH, MT-MMP-2 shRNA Plasmid (m): sc-41568-SH, MT-MMP-2 shRNA (h) Lentiviral Particles: sc-41567-V and MT-MMP-2 shRNA (m) Lentiviral Particles: sc-41568-V.

Molecular Weight of MT-MMP-2: 64 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™ 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.



Try **MT-MMP-2 (YZ-12): sc-80213**, our highly recommended monoclonal alternative to MT-MMP-2 (C-20).