

# MT-MMP-5 (H-50): sc-25529

## BACKGROUND

The matrix metalloproteinases (MMPs) are a family of peptidase enzymes responsible for the degradation of extracellular matrix components, including collagen, gelatin, fibronectin, laminin and proteoglycan. MMP catalysis requires both calcium and zinc. MT-MMP 4 (also known as MMP-17 or MT4-MMP) is a glycosylphosphatidylinositol (GPI)-anchored proteinase. The zinc-dependent MMP has a unique specificity among synthetic substrates and the capability to degrade gelatin and activate progelatinase A. MT-MMP 4 is mainly expressed in the brain, leukocytes, colon, ovary and testis. In addition, MMP-4 is expressed in all breast carcinomas. The human MT-MMP 5 (also known as MMP-24 or MT5-MMP) gene maps to chromosome 20q11.2, a region frequently amplified in tumors. MMP-5 is predominantly expressed in brain, kidney, pancreas and lung. MT-MMP 5 is also expressed at high levels in brain tumors compared to normal brain tissue. MT-MMP 6 (also known as MMP-25, MT6-MMP or Leukolysin) is the second GPI-anchored proteinase in the MMP family. A C-terminal-truncated MMP-6 protein is expressed as a strong gelatinolytic species at 28 kDa that is derived from a cell-associated 34 kDa proenzyme. MT-MMP 6 is expressed in leukocytes, lung and spleen.

## REFERENCES

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- Kojima, S., et al. 2000. Membrane-type 6 matrix metalloproteinase (MT6-MMP, MMP-25) is the second glycosyl-phosphatidyl inositol (GPI)-anchored MMP. *FEBS Letts.* 480: 142-146.
- Velasco, G., et al. 2000. Human MT6-matrix metalloproteinase: identification, progelatinase A activation, and expression in brain tumors. *Cancer Res.* 60: 877-882.

## CHROMOSOMAL LOCATION

Genetic locus: MMP24 (human) mapping to 20q11.2; Mmp24 (mouse) mapping to 2 H1.

## SOURCE

MT-MMP-5 (H-50) is a rabbit polyclonal antibody raised against amino acids 61-110 of MT-MMP-5 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.

## APPLICATIONS

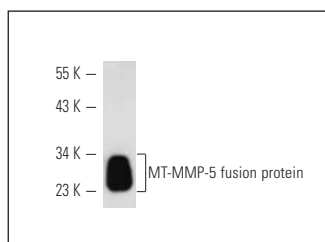
MT-MMP-5 (H-50) is recommended for detection of MT-MMP-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of MT-MMP-5: 63 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MT-MMP-5 (H-50): sc-25529. Western blot analysis of human recombinant MT-MMP-5 fusion protein.

## 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.