

# MT-MMP-6 (H-60): sc-25530

## 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. Membrane-type matrix metalloproteinases 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-6 (also known as MMP-25, MT6-MMP or Leukolysin) is the second GPI-anchored proteinase in the MMP family. Similar to MMP-3, MT-MMP-6 is able to cleave type IV collagen, Fibronectin, fibrin and gelatin. However, MT-MMP-6 cannot cleave Laminin-1 or activate progelatinase B. MT-MMP 6 is expressed in leukocytes, lung and spleen.

## REFERENCES

1. Birkedal-Hansen, H., et al. 1993. Matrix metalloproteinases: a review. *Crit. Rev. Oral Biol. Med.* 4: 197-250.
2. Reinemer, P., et al. 1994. Structural implications for the role of the N terminus in the "superactivation" of collagenases. A crystallographic study. *FEBS Letts.* 338: 227-233.
3. Puente, X.S., et al. 1996. Molecular cloning of a novel membrane-type matrix metalloproteinase from a human breast carcinoma. *Cancer Res.* 56: 944-949.
4. Wang, Y., et al. 1999. Catalytic activities and substrate specificity of the human membrane type 4 matrix metalloproteinase catalytic domain. *J. Biol. Chem.* 274: 33043-33049.
5. Itoh, Y., et al. 1999. Membrane type 4 matrix metalloproteinase (MT4-MMP, MMP-17) is a glycosylphosphatidylinositol-anchored proteinase. *J. Biol. Chem.* 274: 34260-34266.
6. Llano, E., et al. 1999. Identification and characterization of human MT5-MMP, a new membrane-bound activator of progelatinase overexpressed in brain tumors. *Cancer Res.* 59: 2570-2576.

## CHROMOSOMAL LOCATION

Genetic locus: MMP25 (human) mapping to 16p13.3; Mmp25 (mouse) mapping to 17 A3.3.

## SOURCE

MT-MMP-6 (H-60) is a rabbit polyclonal antibody raised against amino acids 341-400 of MT-MMP-6 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.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

MT-MMP-6 (H-60) is recommended for detection of MT-MMP-6 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).

MT-MMP-6 (H-60) is also recommended for detection of MT-MMP-6 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MT-MMP-6 siRNA (h): sc-41573, MT-MMP-6 siRNA (m): sc-41574, MT-MMP-6 shRNA Plasmid (h): sc-41573-SH, MT-MMP-6 shRNA Plasmid (m): sc-41574-SH, MT-MMP-6 shRNA (h) Lentiviral Particles: sc-41573-V and MT-MMP-6 shRNA (m) Lentiviral Particles: sc-41574-V.

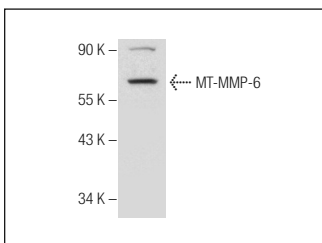
Molecular Weight of MT-MMP-6: 45 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

## 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-6 (H-60): sc-25530. Western blot analysis of MT-MMP-6 expression in HL-60 whole cell lysate.

## RESEARCH USE

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

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Try **MT-MMP-6 (MM0029-2B5): sc-101453**, our highly recommended monoclonal alternative to MT-MMP-6 (H-60).