**MMP-1/8 (A-7): sc-137044**

**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. MMP-9 (also designated 92 kDa type IV collagenase or gelatinase B) has been shown to degrade bone collagens in concert with MMP-1 (also designated interstitial collagenase, fibroblast collagenase or collagenase-1) and cysteine proteases, and may play a role in bone osteoclastic resorption. MMP-1 is downregulated by p53, and abnormality of p53 expression may contribute to joint degradation in rheumatoid arthritis by regulating MMP-1 expression. MMP-8 (also designated neutrophil collagenase, PMNL collagenase or collagenase-2) degrades fibrillar collagen types I, II and III. Unlike other members of the MMP family, MMP-8 is expressed exclusively in inflammatory conditions. MMP-8 is highly expressed in the postpartum uterus, and it is thought to be involved in the postpartum involu- tion of the uterus. MMP-8 is also the predominant collagenase expressed in ulcers and healing wounds.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MMP1/MMP8 (human) mapping to 11q22.2; Mmp8 (mouse) mapping to 9 A1.

**SOURCE**

MMP-1/8 (A-7) is a mouse monoclonal antibody raised against amino acids 100-399 mapping within an internal region of MMP-1 of human origin.

**PRODUCT**

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

MMP-1/8 (A-7) is available conjugated to agarose (sc-137044 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137044 HRP), 200 µg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-137044 PE), fluorescein (sc-137044 FITC), Alexa Fluor® 488 (sc-137044 AF488), Alexa Fluor® 546 (sc-137044 AF546), Alexa Fluor® 594 (sc-137044 AF594) or Alexa Fluor® 647 (sc-137044 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-137044 AF680) or Alexa Fluor® 790 (sc-137044 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

MMP-1/8 (A-7) is recommended for detection of MMP-1 of human origin and MMP-8 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) and solid phase ELISA (starting dilution: 1:30, dilution range: 1:30-1:3000).

Suitable for use as control antibody for MMP-8 siRNA (m): sc-35950, MMP-8 shRNA (m) Lentiviral Particles: sc-35950-V.

Molecular Weight of MMP-1: 52 kDa.
Molecular Weight of latent MMP-8: 65 kDa.
Molecular Weight of active MMP-8: 50 kDa.
Positive Controls: ES-2 cell lysate: sc-24674.

**DATA**


**SELECT PRODUCT CITATIONS**


**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.