**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 collagen 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.

**CHROMOSOMAL LOCATION**

Genetic locus: MMP9 (human) mapping to 20q13.12; Mmp9 (mouse) mapping to 11 chromosome 12.

**SOURCE**

MMP-9 (7-11C) is a mouse monoclonal antibody raised against partially purified human MMP-9.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for blocking processes.

MMP-9 (7-11C) is available conjugated to agarose (sc-13520 AC), 500 µg/ing of protein, for MP-9 (7-11C) is available conjugated to biotin (sc-13520 B), 200 µg/ml, for Western Blotting (starting dilution 1:200, dilution range 1:50-1:1000), immunoperoxidase (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), immunohistochemistry (including paraffin-embedded sections) (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 MMP-9: 92 kDa.

Positive Controls: MMP-9 (h2): 293T Lysate: sc-176046.

**APPLICATIONS**

MMP-9 (7-11C) is recommended for detection of MMP-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoperoxidase (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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**RESEARCH USE**

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

**DATA**

**STORAGE**

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

**SELECT PRODUCT CITATIONS**