MMP-9 (2C3): sc-21733

**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 down-regulated by p53, and abnormality of p53 expression may contribute to joint degradation in rheumatoid arthritis by regulating MMP-1 expression.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MMP9 (human) mapping to 20q13.12.

**SOURCE**

MMP-9 (2C3) is a mouse monoclonal antibody raised against amino acids 603-614 of MMP-9 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-9 (2C3) is available conjugated to agarose (sc-21733 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either Alexa Fluor® 546 (sc-21733 AF546) or Alexa Fluor® 594 (sc-21733 AF594), 200 µg/ml, for WB (RGB), IF, IHC(P) and FC; to either Alexa Fluor® 680 (sc-21733 AF680) or Alexa Fluor® 790 (sc-21733 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

MMP-9 (2C3) is recommended for detection of MMP-9 of 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for MMP-9 siRNA (h): sc-29400, MMP-9 shRNA Plasmid (h): sc-29400-SH and MMP-9 shRNA (h) Lentiviral Particles: sc-29400-V.

Molecular Weight of MMP-9: 92 kDa.

Positive Controls: human breast extract: sc-363753.

**STORAGE**

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

**DATA**


MMP-9 (2C3): sc-21733. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human heart tissue showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of subset of cells in red pulp (B).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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