BACKGROUND

The matrix metalloproteinases (MMP) are a family of peptide 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-2 (also designated type IV collagenase) cleaves collagen types IV, V, VII and X and gelatin type I. Activation of MMP-2 secretion requires the Ras signaling pathway.

CHROMOSOMAL LOCATION

Genetic locus: MMP2 (human) mapping to 16q12.2; Mmp2 (mouse) mapping to 8 C5.

SOURCE

MMP-2 (8B4) is a mouse monoclonal antibody raised against activated recombinant MMP-2 of human origin.

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.

MMP-2 (8B4) is available conjugated to agarose (sc-13595 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, IP (sc-13595 HRP), 200 µg/ml, for WB, HRP (sc-13595 PE), fluorescein (sc-13595 FITC), Alexa Fluor® 488 (sc-13595 AF488), Alexa Fluor® 546 (sc-13595 AF546), Alexa Fluor® 594 (sc-13595 AF594) or Alexa Fluor® 647 (sc-13595 AF674), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-13595 AF680) or Alexa Fluor® 790 (sc-13595 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

APPLICATIONS

MMP-2 (8B4) is recommended for detection of MMP-2 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), 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). Suitable for use as control antibody for MMP-2 siRNA (h): sc-29398, MMP-2 siRNA (m): sc-37264, MMP-2 siRNA (r): sc-108049, MMP-2 shRNA Plasmid (h): sc-29398-SH, MMP-2 shRNA Plasmid (m): sc-37264-SH, MMP-2 shRNA Plasmid (r): sc-108049-SH, MMP-2 shRNA Plasmid (h) Lentiviral Particles: sc-29398-V, MMP-2 shRNA (m) Lentiviral Particles: sc-37264-V and MMP-2 shRNA (r) Lentiviral Particles: sc-108049-V.

Molecular Weight of pro-MMP-2: 72 kDa.

Molecular Weight of cleaved MMP-2: 63 kDa.

Positive Controls: ECV304 cell lysate: sc-2269 or A-375 cell lysate: sc-3811.

STORAGE

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

DATA

SELECT PRODUCT CITATIONS


RESEARCH USE

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