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 proteinases 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.

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

SOURCE
MMP-9 (6-6B) is a mouse monoclonal antibody raised against partially purified MMP-9 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. Also available azide-free for biological studies, sc-12759 L, 200 µg/0.1 ml.

MMP-9 (6-6B) is available conjugated to agarose (sc-12759 AC), 500 µg/0.25 ml agarose in 1 ml; for WB, ELISA; to either phycocerythrin (sc-12759 PE), fluorescein (sc-12759 FITC), Alexa Fluor® 488, Alexa Fluor® 546 (sc-12759 AF488), Alexa Fluor® 594 (sc-12759 AF546), Alexa Fluor® 647 (sc-12759 AF647), 200 µg/ml, for WB (RGB), IF, IHQP and FCM; and to either Alexa Fluor® 680 (sc-12759 AF680) or Alexa Fluor® 790 (sc-12759 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS
MMP-9 (6-6B) 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), 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.

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

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


PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.