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# MMP-9 (h2): 293T Lysate: sc-176046

## 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.

## REFERENCES

1. Templeton, N.S., Brown, P.D., Levy, A.T., Margulies, I.M., Liotta, L.A. and Stetler-Stevenson, W.G. 1990. Cloning and characterization of human tumor cell interstitial collagenase. *Cancer Res.* 50: 5431-5437.
2. Birkedal-Hansen, H., Moore, W.G., Bodden, M.K., Windsor, L.J., Birkedal-Hansen, B., DeCarlo, A. and Engler, J.A. 1993. Matrix metalloproteinases: a review. *Crit. Rev. Oral Biol. Med.* 4: 197-250.
3. Reinemer, P., Grams, F., Huber, R., Kleine, T., Schnierer, S., Piper, M., Tschesche, H. and Bode, W. 1994. Structural implications for the role of the N-terminus in the "superactivation" of collagenases. A crystallographic study. *FEBS Lett.* 338: 227-233.
4. Reponen, P., Sahlberg, C., Munaut, C., Thesleff, I. and Tryggvason, K. 1994. High expression of 92 kDa type IV collagenase (gelatinase B) in the osteoclast lineage during mouse development. *J. Cell Biol.* 124: 1091-1102.
5. Okada, Y., Naka, K., Kawamura, K., Matsumoto, T., Nakanishi, I., Fujimoto, N., Sato, H. and Seiki, M. 1995. Localization of matrix metalloproteinase-9 (92 kilodalton gelatinase/type IV collagenase=gelatinase B) in osteoclasts: implications for bone resorption. *Lab. Invest.* 72: 311-322.
6. Machein, U. and Conca, W. 1997. Expression of several matrix metalloproteinase genes in human monocytic cells. *Adv. Exp. Med. Biol.* 421: 247-251.
7. Sun, Y., Wenger, L., Rutter, J.L., Brinckerhoff, C.E. and Cheung, H.S. 1999. p53 down-regulates human matrix metalloproteinase-1 (Collagenase-1) gene expression. *J. Biol. Chem.* 274: 11535-11540.

## CHROMOSOMAL LOCATION

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

## PRODUCT

MMP-9 (h2): 293T Lysate represents a lysate of human MMP-9 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

MMP-9 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive MMP-9 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.