Product Information Sheet

Polyclonal Anti-MMP14

Catalogue No. PA1115

Lot No. 08J01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat, mouse.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunohistochemistry(F)

Immunogen

A synthetic peptide mapping at the C-terminal of human MMP14 different from the related mouse sequence by single amino acid.

Purity

Immunogen affinity purified.

Application

Western blot

At 0.5-1µg/ml with the appropriate system to detect MMP14 in cells and tissues.

Immunohistochemistry(P)

At 1-2 µg/ml to detect MMP14 in formalin fixed and paraffin embedded tissues.

Immunohistochemistry(F)

At 1-2 µg/ml to detect MMP14 in formalin or acetone fixed tissues.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

BACKGROUND

Matrix metalloproteinases (MMPs) are Zn(2+)-binding endopeptidases that degrade various components of the extracellular matrix (ECM). The MMPs are enzymes implicated in normal and pathologic tissue remodeling processes, wound healing, angiogenesis, and tumor invasion. MMPs have different substrate specificities and are encoded by different genes. membrane-type matrix metalloproteinase (MMP14) may be an activator of pro-gelatinase A (MMP2) and is expressed in fibroblast cells during both wound healing and human cancer progression. Survivin, MMP2, MMP9, and MMP14 mRNA expression levels in clinically aggressive pigmented lesions were significantly higher than those in normal eutopic endometrium, and survivin gene expression in pigmented lesions was also higher than that in nonpigmented lesions (P less than 0.05). There was a close correlation between survivin and MMP2, MMP9, and MMP14 gene expression levels in 63 endometriotic tissues examined (P less than 0.01).

REFERENCE

1. Holmbeck, K.; Bianco, P.; Caterina, J.; Yamada, S.; Kromer, M.; Kuznetsov, S. A.; Mankani, M.; Robey, P. G.; Poole, A. R.; Pidoux, I.; Ward, J. M.; Birkedal-Hansen, H. : MT1-MMP-deficient mice develop dwarfism, osteopenia, arthritis, and connective tissue disease due to inadequate collagen turnover. *Cell* 99: 81-92, 1999.

2. Oh, J.; Takahashi, R.; Adachi, E.; Kondo, S.; Kuratomi, S.; Noma, A.; Alexander, D. B.; Motoda, H.; Okada, A.; Seiki, M.; Itoh, T.; Itohara, S.; Takahashi, C.; Noda, M. : Mutations in two matrix metalloproteinase genes, MMP-2, and MT1-MMP, are synthetic lethal in mice. *Oncogene* 23: 5041-5048, 2004.