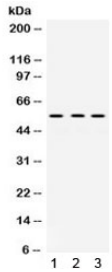
Matrix Metalloproteinase 1 Antibody (R31876)

Catalog No.	Formulation	Size
R31876	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P03956
Applications	Western blot: 0.1-0.5ug/ml
Limitations	This Matrix Metalloproteinase 1 Antibody is available for research use only.



Matrix Metalloproteinase 1 Antibody Human Cancer Cell WB. Western blot analysis using Matrix Metalloproteinase 1 Antibody. Lane 1: human SMMC cells; Lane 2: human 22RV1 cells; Lane 3: human MCF7 cells. A specific band is detected at approximately 54 kDa in each sample, consistent with the expected molecular weight of the MMP1 proenzyme (pro-MMP1). These results support the use of Matrix Metalloproteinase 1 Antibody for studying extracellular matrix remodeling, matrix metalloproteinase signaling and cancer-associated tissue remodeling.

Description

Matrix Metalloproteinase 1 Antibody detects MMP1, the founding member of the matrix metalloproteinase family responsible for initiating degradation of fibrillar collagens within the extracellular matrix. Matrix metalloproteinase 1 is a zinc-dependent endopeptidase that preferentially cleaves collagen types I, II and III, allowing controlled remodeling of connective tissues during normal physiological processes such as wound healing, embryonic development and tissue repair. Matrix Metalloproteinase 1 Antibody is widely used to investigate extracellular matrix turnover, stromal biology and protease-mediated signaling.

Matrix metalloproteinase 1 is synthesized as an inactive zymogen and secreted into the extracellular environment, where proteolytic activation enables degradation of structural collagen fibers. The enzyme is expressed by fibroblasts, epithelial cells, endothelial cells, macrophages and numerous tumor cells following stimulation by inflammatory cytokines, growth factors and tissue injury. Because matrix metalloproteinase 1 regulates the balance between extracellular matrix degradation and preservation, it plays an important role in maintaining tissue architecture while facilitating cell migration and remodeling.

Abnormal expression of matrix metalloproteinase 1 has been linked to a wide range of diseases, particularly those involving excessive connective tissue destruction or pathological remodeling. Elevated MMP1 levels have been associated with tumor invasion, metastatic progression, fibrosis, arthritis, chronic inflammatory disorders and cardiovascular disease. Consequently, Matrix Metalloproteinase 1 Antibody has become an important research tool for investigating mechanisms of cancer progression, extracellular matrix degradation and disease-associated tissue remodeling.

Matrix metalloproteinase 1 functions within a highly regulated protease network that includes additional matrix metalloproteinases together with endogenous tissue inhibitors of metalloproteinases. Coordinated regulation of these enzymes governs extracellular matrix homeostasis, angiogenesis, inflammatory responses and stromal remodeling. Measuring MMP1 expression provides valuable insight into protease activity and connective tissue dynamics across both normal physiology and disease models.

NSJ Bioreagents offers Matrix Metalloproteinase 1 Antibody products for researchers studying extracellular matrix remodeling, collagen degradation and cancer biology. These antibodies support applications including Western blot, immunohistochemistry, immunofluorescence and flow cytometry analysis of MMP1 expression and localization. Matrix Metalloproteinase 1 Antibody provides a valuable tool for investigating extracellular protease biology, stromal remodeling and matrix metalloproteinase signaling pathways.

Researchers studying matrix metalloproteinase biology and extracellular matrix remodeling may also be interested in our MMP1 Antibody / Interstitial Collagenase Antibody page, which highlights MMP1 function in tumor invasion, collagen degradation and cancer-associated extracellular matrix remodeling.

Application Notes

Optimal dilution of the Matrix Metalloproteinase 1 Antibody should be determined by the researcher.

Immunogen

Amino acids DAHFDEDERWTNNFREYNLHRVAAHELGHSLGLSHSTD of human MMP1 were used as the immunogen for the MMP-1 / Matrix Metalloproteinase 1 antibody.

Storage

After reconstitution, the MMP-1 / Matrix Metalloproteinase 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

MMP1 antibody, Interstitial Collagenase antibody, Fibroblast Collagenase antibody, Collagenase 1 antibody, MMP-1 antibody, CLG antibody

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