



MMP-9 Monoclonal Antibody

Catalog No	YP-Ab-02333
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;IF;FCM;ELISA
Gene Name	MMP9
Immunogen	Purified recombinant fragment of human MMP-9 expressed in E. Coli.
Specificity	MMP-9 Monoclonal Antibody detects endogenous levels of MMP-9 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AW743869;B/MMP9;Clg4b;matrix metalloproteinase 9;MMP 9;Mmp9;pro MMP 9; MMP-9;Matrix metalloproteinase-9;92 kDa gelatinase;92 kDa type IV collagenase;Gelatinase B;GELB
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Secreted, extracellular space, extracellular matrix .
Tissue Specificity	Detected in neutrophils (at protein level) (PubMed:7683678). Produced by normal alveolar macrophages and granulocytes.
Function	catalytic activity:Cleavage of gelatin types I and V and collagen types IV and V., cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 3 calcium ions per subunit., disease:Defects in MMP9 may be a cause of susceptibility to lumbar disk herniation (LDH) [MIM:603932]. LDH is the predominant cause of low-back pain and unilateral leg pain.,domain:The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.,enzyme regulation:Inhibited by histatin-3 1/24 (histatin-5)., function:May play an essential role in local proteolysis of the extracellular matrix



and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-|-Leu bond. Cleaves type IV and type V collagen into large C-terminal three qua

Background

matrix metalloproteinase 9(MMP9) Homo sapiens Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The enzyme encoded by this gene degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. [provided by RefSeq, Jul 2008],

matters needing attention

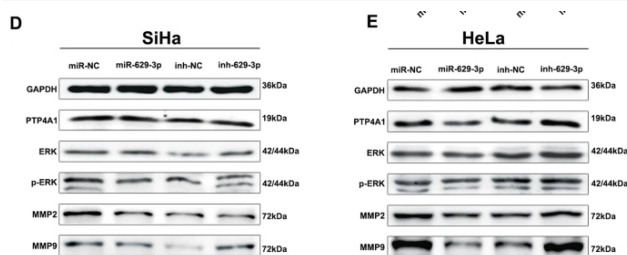
Avoid repeated freezing and thawing!

Usage suggestions

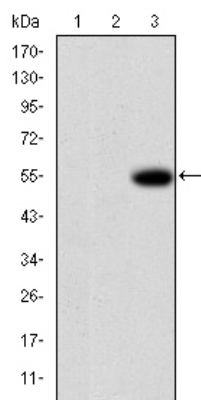
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



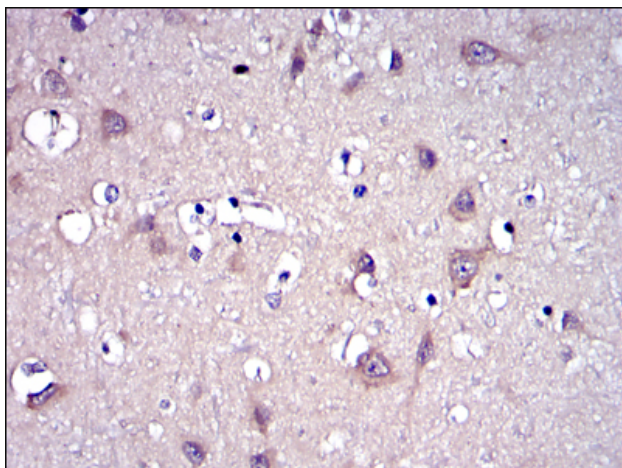
Products Images



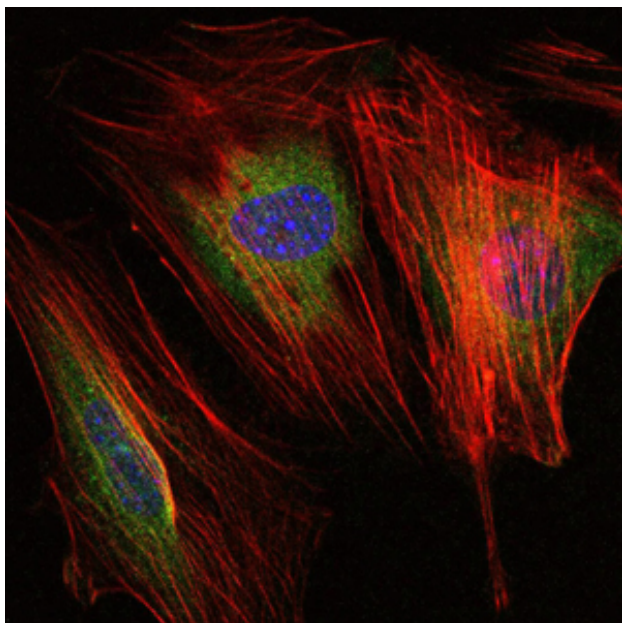
Li, X., Ma, N., Zhang, Y. et al. Circular RNA circNRIP1 promotes migration and invasion in cervical cancer by sponging miR-629-3p and regulating the PTP4A1/ERK1/2 pathway. Cell Death Dis 11, 399 (2020).



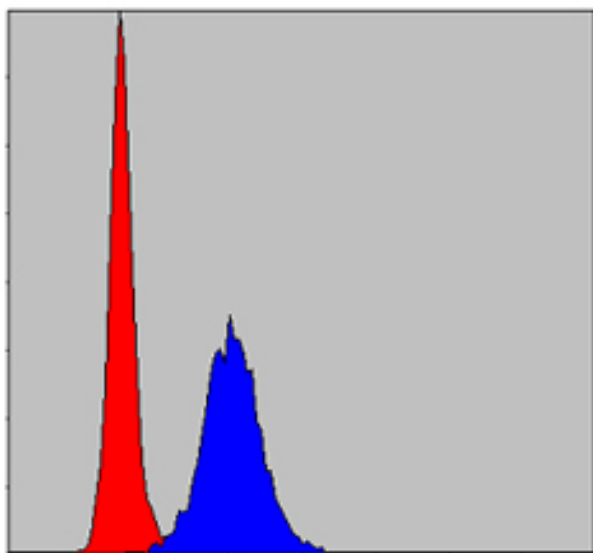
Western Blot analysis using MMP-9 Monoclonal Antibody against HEK293 (1), MMP7-hlgGfc transfected HEK293 (2) cell lysate and MMP9-hlgGfc transfected HEK293 (3) cell lysate.



Immunohistochemistry analysis of paraffin-embedded brain tissues with DAB staining using MMP-9 Monoclonal Antibody.



Immunofluorescence analysis of NIH/3T3 cells using MMP-9 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HeLa cells using MMP-9 Monoclonal Antibody (blue) and negative control (red).