ARG66964
anti-MMP1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MMP1
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MMP1
Species	Human
Immunogen	Synthetic peptide around the middle region of Human MMP1.
Conjugation	Un-conjugated
Alternate Names	MMP-1; CLG; Fibroblast collagenase; Matrix metalloproteinase-1; CLGN; EC 3.4.24.7; Interstitial collagenase

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100 - 1:300
IHC-P	1:100 - 1:200
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 50-54 kDa

Properties

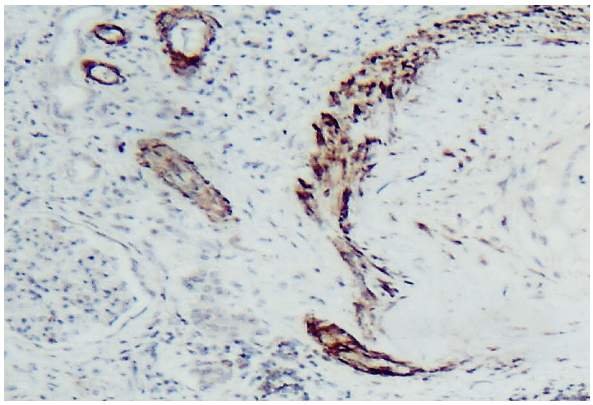
Form	Liquid
Purification	Affinity purified.
Buffer	100 mM Tris Glycine (pH 7.0), 0.025% ProClin 300, 1%BSA and 20% Glycerol.
Preservative	0.025% ProClin 300
Stabilizer	1%BSA and 20% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

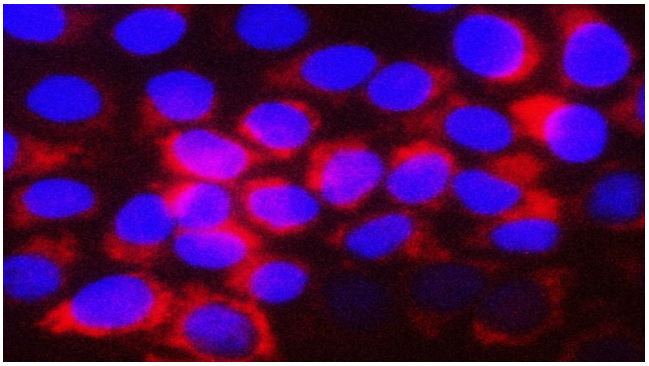
Gene Symbol	MMP1
Gene Full Name	matrix metallopeptidase 1
Background	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Mar 2009]
Function	Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity. [UniProt]
Calculated Mw	54 kDa
PTM	Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase. Tyrosine phosphorylated in platelets by PKDCC/VLK. [UniProt]
Cellular Localization	Secreted, extracellular space, extracellular matrix. [UniProt]

Images



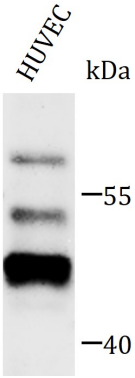
ARG66964 anti-MMP1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded mouse testis tissue section stained with ARG66964 anti-MMP1 antibody at 1:100 dilution.



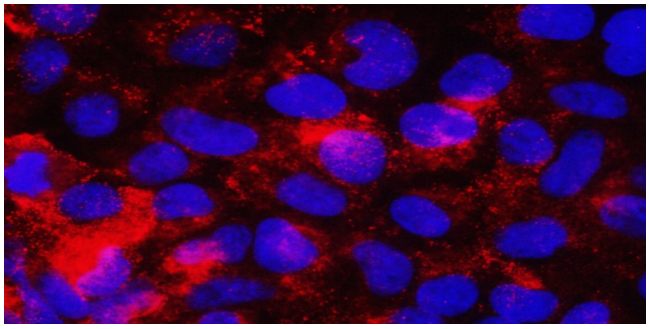
ARG66964 anti-MMP1 antibody ICC/IF image

Immunofluorescence: 4% paraformaldehyde-fixed A549 cells were permeabilized with 0.1% NP-40 for 5-10 minutes and blocked with 5% BSA for 30 minutes at room temperature. Cells were stained with ARG66964 anti-MMP1 antibody at 1:300 dilution.



ARG66964 anti-MMP1 antibody WB image

Western blot: HUVES cells stained with ARG66975 ARG66964 anti-MMP1 antibody at 1:500 dilution on 7.5% SDS-PAGE.



ARG66964 anti-MMP1 antibody ICC/IF image

Immunofluorescence: 4% paraformaldehyde-fixed Huh-7 cells were permeabilized with 0.1% NP-40 for 5-10 minutes and blocked with 5% BSA for 30 minutes at room temperature. Cells were stained with ARG66964 anti-MMP1 antibody at 1:300 dilution.