# ARG66709
# anti-MMP1 antibody

Package: 100 µl
Store at: -20°C

## Summary

| | |
|---|---|
| Product Description | Rabbit Polyclonal antibody recognizes MMP1 |
| Tested Reactivity | Hu, Ms, Rat |
| Tested Application | ICC/IF, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | MMP1 |
| Species | Human |
| Immunogen | KLH-conjugated synthetic peptide within the C-terminal 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 - 1:500 |
| 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: ~ 54 kDa

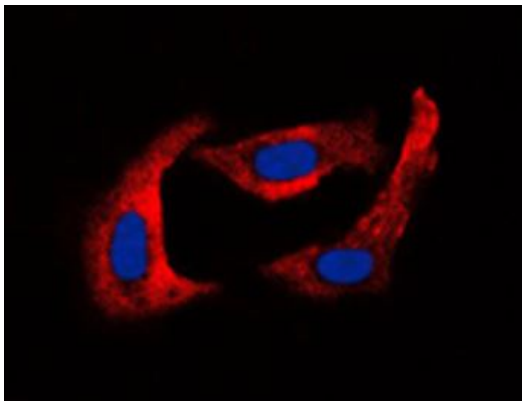
## Properties

| | |
|---|---|
| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | 0.42% Potassium phosphate (pH 7.3), 0.87% NaCl, 0.01% Sodium azide and 30% Glycerol. |
| Preservative | 0.01% Sodium azide |
| Stabilizer | 30% 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

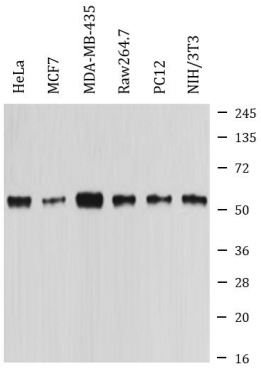
| | |
|---|---|
| Gene Symbol | MMP1 |
| Gene Full Name | matrix metallopeptidase 1 |
| Background | Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, 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.<br><br>Tyrosine phosphorylated in platelets by PKDCC/VLK. [UniProt] |
| Cellular Localization | Secreted, extracellular space, extracellular matrix. [UniProt] |

## Images



ARG66709 anti-MMP1 antibody ICC/IF image

Immunofluorescence: Formalin-fixed MCF7 cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were stained with ARG66709 anti-MMP1 antibody (red) in 3% BSA-PBS and incubated overnight at 4°C in a humidified chamber. DAPI (blue) for nuclear staining.




ARG66709 anti-MMP1 antibody WB image

Western blot: HeLa, MCF7, MDA-MB-435, Raw264.7, PC12 and NIH/3T3 whole cell lysates stained with ARG66709 anti-MMP1 antibody.