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MMP1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1586a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P03956
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6A5
Isotype	IgG1
Calculated MW	54007
Description	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.
Immunogen	Purified recombinant fragment of human MMP1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	4312
Other Names	Interstitial collagenase, 3.4.24.7, Fibroblast collagenase, Matrix metalloproteinase-1, MMP-1, 22 kDa interstitial collagenase, 27 kDa interstitial collagenase, MMP1, CLG
Dilution	WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MMP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MMP1
Synonyms	CLG
Function	Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X (PubMed:1645757, PubMed:2153297, PubMed:2557822). In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity (PubMed:16807369).
Cellular Location	Secreted, extracellular space, extracellular matrix

References

1. Arthritis Res Ther. 2009;11(6):R169. 2. FEMS Microbiol Lett. 2009 Oct;299(2):214-22.

Images

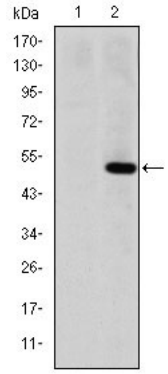


Figure 1: Western blot analysis using MMP1 mAb against HEK293 (1) and MMP1(AA: 24-213)-hIgGFc transfected HEK293 (2) cell lysate.

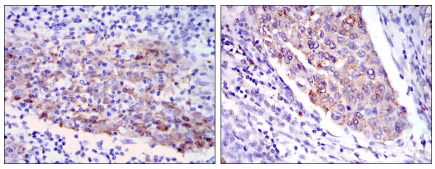


Figure 2: Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues (left) and human kidney cancer tissues (right) using MMP1 mouse mAb with DAB staining.

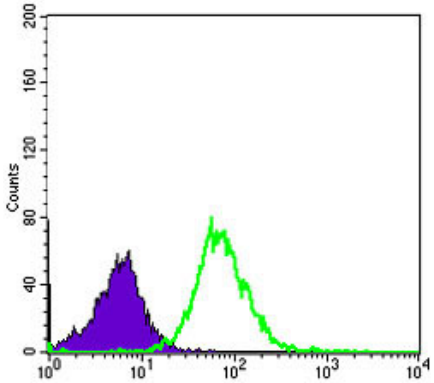
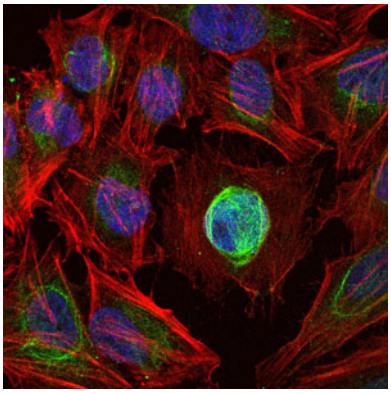


Figure 3: Flow cytometric analysis of Hela cells using MMP1 mouse mAb (green) and negative control (purple).

Figure 4: Immunofluorescence analysis of Hela cells using MMP1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.