10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MMP1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11874c

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P03956
Other Accession	NP_002412
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18908
Calculated MW	54007
Antigen Region	317-347

Additional Information

Gene ID	4312
Other Names	Interstitial collagenase, Fibroblast collagenase, Matrix metalloproteinase-1, MMP-1, 22 kDa interstitial collagenase, 27 kDa interstitial collagenase, MMP1, CLG
Target/Specificity	This MMP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 317-347 amino acids from the Central region of human MMP1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MMP1 Antibody (Center) 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

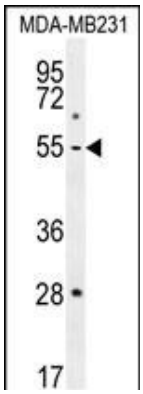
Background

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.

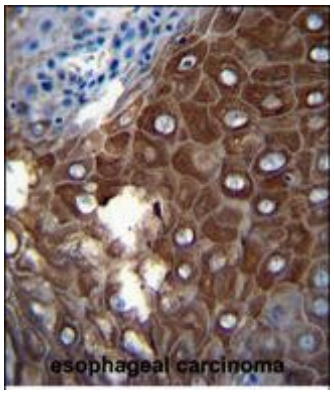
References

Beshir, A.B., et al. Cancer Lett. 299(2):137-149(2010)
Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :
Malik, N., et al. J. Neurooncol. (2010) In press :
Skorupski, P., et al. Ginekol. Pol. 81(8):594-599(2010)
Mossbock, G., et al. Mol. Vis. 16, 1764-1770 (2010) :

Images

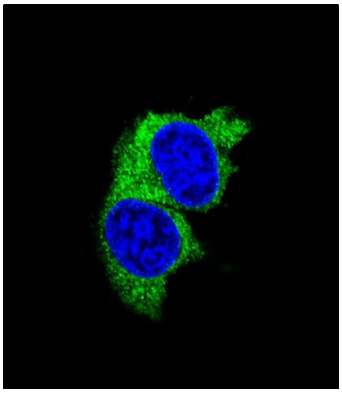


MMP1 Antibody (Center) (Cat. #AP11874c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the MMP1 antibody detected the MMP1 protein (arrow).



MMP1 Antibody (Center) (Cat. #AP11874c)immunohistochemistry analysis in formalin fixed and paraffin embedded human esophageal carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MMP1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of MMP1 Antibody (Center) (Cat#AP11874c) with MDA-MB231 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG



(green). DAPI was used to stain the cell nuclear (blue).