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MMP7 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6212a

Product Information

Application	IHC-P, IF, WB, E
Primary Accession	P09237
Other Accession	NP_002414
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2092
Calculated MW	29677
Antigen Region	117-146

Additional Information

Gene ID	4316
Other Names	Matrilysin, Matrin, Matrix metalloproteinase-7, MMP-7, Pump-1 protease, Uterine metalloproteinase, MMP7, MPSL1, PUMP1
Target/Specificity	This MMP7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 117-146 amino acids from the Central region of human MMP7.
Dilution	IHC-P~~1:100~500 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	MMP7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MMP7
Synonyms	MPSL1, PUMP1

Function	Degrades casein, gelatins of types I, III, IV, and V, and fibronectin. Activates procollagenase.
Cellular Location	Secreted, extracellular space, extracellular matrix

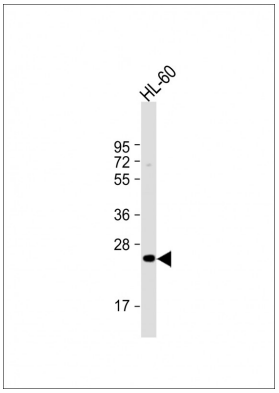
Background

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 MMPs are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. MMP7 degrades proteoglycans, fibronectin, elastin and casein and differs from most MMP family members in that it lacks a conserved C-terminal protein domain. The enzyme is involved in wound healing, and studies in mice suggest that it regulates the activity of defensins in intestinal mucosa. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3.

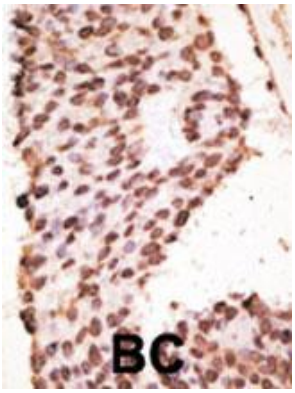
References

Filippov, S., et al., J. Exp. Med. 198(6):925-935 (2003). Rivat, C., et al., FASEB J. 17(12):1721-1723 (2003). Fu, X., et al., J. Biol. Chem. 278(31):28403-28409 (2003). McGuire, J.K., et al., Am. J. Pathol. 162(6):1831-1843 (2003). Sumi, T., et al., Oncol. Rep. 10(2):345-349 (2003).

Images

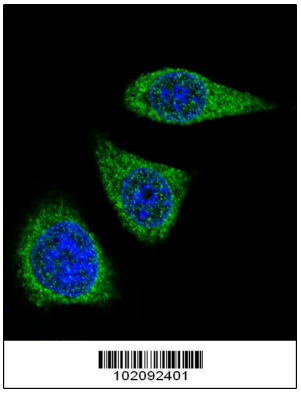


Anti-MMP7 Antibody (A132) at 1:1000 dilution + HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Confocal immunofluorescent analysis of MMP7 Antibody (Center) (Cat. #AP6212a) with 293 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



Citations

- AGEs-Induced Calcification and Apoptosis in Human Vascular Smooth Muscle Cells Is Reversed by Inhibition of Autophagy