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MMP13 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51348

Product Information

Application	WB, ICC, IHC-P
Primary Accession	P45452
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53820

Additional Information

Gene ID	4322
Other Names	Collagenase 3, 3424-, Matrix metalloproteinase-13, MMP-13, MMP13
Dilution	WB~~1:1000 ICC~~N/A IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	MMP13
Function	Plays a role in the degradation of extracellular matrix proteins including fibrillar collagen, fibronectin, TNC and ACAN. Cleaves triple helical collagens, including type I, type II and type III collagen, but has the highest activity with soluble type II collagen. Can also degrade collagen type IV, type XIV and type X. May also function by activating or degrading key regulatory proteins, such as TGFB1 and CCN2. Plays a role in wound healing, tissue remodeling, cartilage degradation, bone development, bone mineralization and ossification. Required for normal embryonic bone development and ossification. Plays a role in the healing of bone fractures via endochondral ossification. Plays a role in wound healing, probably by a mechanism that involves proteolytic activation of TGFB1 and degradation of CCN2. Plays a role in keratinocyte migration during wound healing. May play a role in cell migration and in tumor cell invasion.
Cellular Location	Secreted, extracellular space, extracellular matrix. Secreted
Tissue Location	Detected in fetal cartilage and calvaria, in chondrocytes of hypertrophic cartilage in vertebrae and in the dorsal end of ribs undergoing ossification, as well as in osteoblasts and periosteal cells below the inner periosteal region of

ossified ribs Detected in chondrocytes from in joint cartilage that have been treated with TNF and IL1B, but not in untreated chondrocytes. Detected in T lymphocytes. Detected in breast carcinoma tissue

Background

Degrades collagen type I. Does not act on gelatin or casein. Could have a role in tumoral process.

References

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Willmroth F.,et al.Immunobiology 198:375-384(1998).
Gomis-Rueth F.-X.,et al.J. Mol. Biol. 264:556-566(1996).
Kennedy A.M.,et al.J. Clin. Invest. 115:2832-2842(2005).
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Citations

- Nkx2-5 Is Expressed in Atherosclerotic Plaques and Attenuates Development of Atherosclerosis in Apolipoprotein E-Deficient Mice.