

MMP13 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51348

Specification

MMP13 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, ICC, IHC-P, E
P45452
Human, Mouse, Rat
Rabbit
Polyclonal
48 KDa

MMP13 Antibody - 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 E~~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

MMP13 Antibody - 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

MMP13 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MMP13 Antibody - Images

MMP13 Antibody - Background

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

MMP13 Antibody - References

Freije J.M.P., et al.J. Biol. Chem. 269:16766-16773(1994). 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). Lausch E., et al.Am. J. Hum. Genet. 85:168-178(2009).

MMP13 Antibody - Citations

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