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Anti-MMP-13 Picoband Antibody

Catalog # ABO10076

Specification

Anti-MMP-13 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P45452
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Collagenase 3 (MMP13) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MMP-13 Picoband Antibody - Additional Information

Gene ID 4322

Other Names
Collagenase 3, 3.4.24.-, Matrix metalloproteinase-13, MMP-13, MMP13

Calculated MW
53820 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Secreted, extracellular space, extracellular matrix . Secreted .

Tissue Specificity
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. .

Protein Name
Collagenase 3

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human MMP13 (109-154aa RTLKWSKMNLTYRIVNYTPDMTHSEVEKAFKKAFKVWSDVTPLNFT), different from the related mouse

sequence by four amino acids, and from the related rat sequence by five amino aci

Purification
Immunogen affinity purified.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-MMP-13 Picoband 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

Anti-MMP-13 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MMP-13 Picoband Antibody - Images

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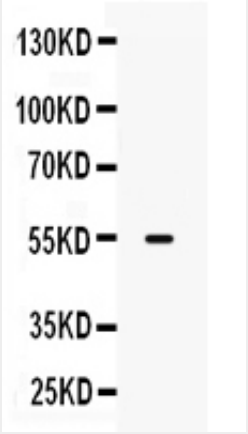

Western blot analysis of MMP13 expression in HELA whole cell lysates (lane 1). MMP13 at 54KD was detected using rabbit anti- MMP13 Antigen Affinity purified polyclonal antibody (Catalog # ABO10076) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method

Anti-MMP-13 Picoband Antibody - Background

Collagenase 3 is an enzyme that in humans is encoded by the MMP13 gene. This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this 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. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. Mutations in this gene are associated with metaphyseal anadysplasia. This gene is part of a cluster of MMP genes on chromosome 11.