

MMP13 Antibody

Rabbit mAb Catalog # AP90977

Specification

MMP13 Antibody - Product Information

| Application | WB |
|---|---------------|
| Primary Accession | <u>P45452</u> |
| Clonality | Monoclonal |
| Other Names | |
| CLG3; matrix metalloproteinase 13 (collagenase 3); MMP13; | |
| | |

| Isotype | Rabbit IgG |
|---------------|------------|
| Host | Rabbit |
| Calculated MW | 53820 Da |

MMP13 Antibody - Additional Information

| Dilution Purification Immunogen | WB~~1:1000 Affinity-chromatography A synthesized peptide derived from human MMP13 |
|---------------------------------------|--|
| Description | Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia Missouri type (SEMD-MO) [MIM:602111]. A bone disease characterized by moderate to severe metaphyseal changes, mild epiphyseal involvement, rhizomelic shortening of the lower limbs with bowing of the femora and/or tibiae, coxa vara, genu varum and pear-shaped vertebrae in childhood. Epimetaphyseal changes improve with age. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

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

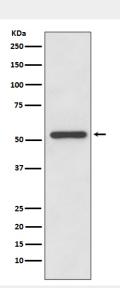
Detected in fetal cartilage and calvaria, in chondrocytes of hypertrophic cartilage in vertebrae and in the dorsal end of ribs undergoing ossification, as well as in osteoblasts and periosteal cells below the inner periosteal region of ossified ribs Detected in chondrocytes from in joint cartilage that 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.

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

MMP13 Antibody - Images



Western blot analysis of MMP13 expression in HeLa cell lysate.