Best Tools for immunology Research

MMP13 (PT0161R) rabbit mAb

Catalog No :	YM8096
Reactivity :	Human; Mouse;
Applications :	WB;IHC;IF;IP;ELISA
Target :	MMP-13
Fields :	>>IL-17 signaling pathway;>>Relaxin signaling pathway;>>Parathyroid hormone synthesis, secretion and action
Gene Name :	MMP13
Protein Name :	Collagenase 3
Human Gene Id :	4322
Human Swiss Prot No :	P45452
Mouse Swiss Prot No :	P33435
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:100-500,WB 1:500-2000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200
Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	60kD
Observed Band :	60kD

Cell Pathway : Angiogenesis

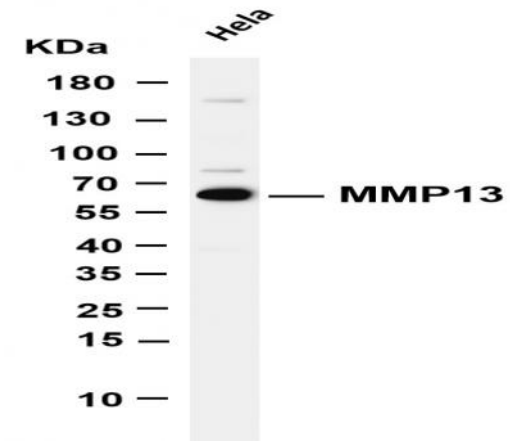
Background : This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease 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. [provided by RefSeq, Jan 2016],

Function : cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 4 calcium ions per subunit.,disease:Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia type 2 (SEMD2) [MIM:602111]; also known as spondyloepimetaphyseal dysplasia type Missouri. SEMDs are a heterogeneous group of skeletal disorders characterized by defective growth and modeling of the spine and long bones. The SEMDs are distinguished from the spondylometaphyseal dysplasias and the spondyloepiphyseal dysplasias by the combined involvement of the epiphyses and metaphyses. The 3 disorders have malformations of the vertebrae in common.,domain:The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.,function:Degrades collagen type I. Does not act on gelati

Subcellular Location : Secreted

Expression : 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.

Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-MMP13 (PT0161R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Predicted band size: 60kDa Observed band size: 60kDa