Best Tools for immunology Research

MMP1 (Cleaved-Ile271) rabbit pAb

Catalog No :	YC0185
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA;IHC
Target :	MMP-1
Fields :	>>PPAR signaling pathway;>>IL-17 signaling pathway;>>Relaxin signaling pathway;>>Coronavirus disease - COVID-19;>>Pathways in cancer;>>Bladder cancer;>>Rheumatoid arthritis;>>Lipid and atherosclerosis
Gene Name :	MMP1 CLG
Protein Name :	MMP1 (Cleaved-Ile271)
Human Gene Id :	4312
Human Swiss Prot No :	P03956
Immunogen :	Synthesized peptide derived from human MMP1 (Cleaved-Ile271)
Specificity :	This antibody detects endogenous levels of Human MMP1 (Cleaved-Ile271, protein was cleaved amino acid sequence between 270-271)
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
Purification :	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

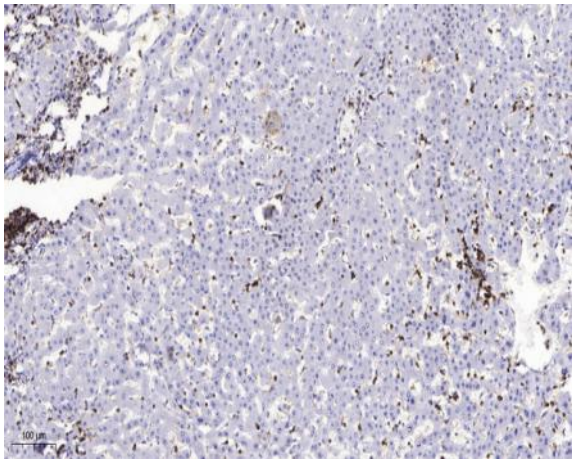
Observed Band : 22 53kD

Background : catalytic activity:Cleavage of the triple helix of collagen at about three-quarters of the length of the molecule from the N-terminus, at 775-Gly-|-Ile-776 in the alpha-1(I) chain. Cleaves synthetic substrates and alpha-macroglobulins at bonds where P1' is a hydrophobic residue.,cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 4 calcium ions per subunit.,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.,domain:There are two distinct domains in this protein; the catalytic N-terminal, and the C-terminal which is involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases).,enzyme regulation:Can be activated without removal of the activation peptide.,function:Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity.,online information:Collagenase entry,PTM:Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,subunit:Interacts with HIV-1 Tat.,

Function : proteolysis, collagen catabolic process, collagen metabolic process, multicellular organismal metabolic process,multicellular organismal catabolic process, multicellular organismal macromolecule metabolic process,

Subcellular Location : Secreted, extracellular space, extracellular matrix .

Products Images



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).