Best Tools for immunology Research

# Cleaved-MMP-1 22k (F100) Polyclonal Antibody

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| **Catalog No :** | YC0099 |
| **Reactivity :** | Human;Rat;Mouse; |
| **Applications :** | WB;ELISA |
| **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 |
| **Protein Name :** | Interstitial collagenase |
| **Human Gene Id :** | 4312 |
| **Human Swiss Prot No :** | P03956 |
| **Immunogen :** | The antiserum was produced against synthesized peptide derived from human MMP1. AA range:81-130 |
| **Specificity :** | Cleaved-MMP-1 22k (F100) Polyclonal Antibody detects endogenous levels of fragment of activated MMP-1 22k protein resulting from cleavage adjacent to F100. |
| **Formulation :** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source :** | Polyclonal, Rabbit,IgG |
| **Dilution :** | WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications. |
| **Purification :** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Concentration :** | 1 mg/ml |

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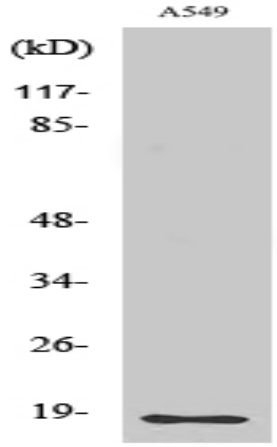
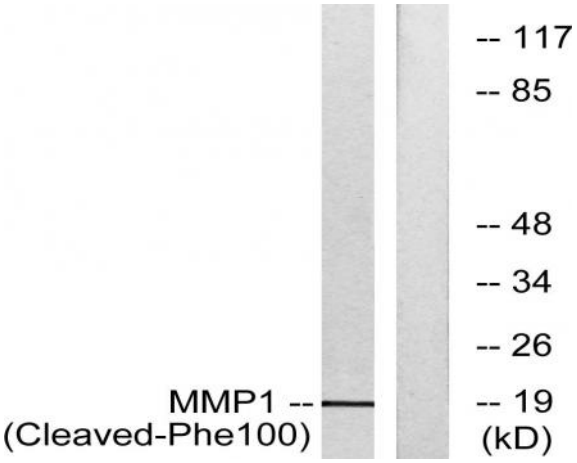
| **Storage Stability :** | -15°C to -25°C/1 year(Do not lower than -25°C) |
| **Observed Band :** | 19kD |
| **Cell Pathway :** | PPAR;Pathways in cancer;Bladder cancer; |
| **Background :** | matrix metallopeptidase 1(MMP1) Homo sapiens This gene encodes a member of the peptidase M10 family of matrix 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 secreted protease breaks down the interstitial collagens, including types I, II, and III. The gene is part of a cluster of MMP genes on chromosome 11. Mutations in this gene are associated with chronic obstructive pulmonary disease (COPD). Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016], |
| **Function :** | 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 col |
| **Subcellular Location :** | Secreted, extracellular space, extracellular matrix . |
| **Expression :** | Fibroblast,Ovary,Synovial cell,Synovial membrane,Thyroid, |

## Products Images




Western Blot analysis of various cells using Cleaved-MMP-1 22k (F100) Polyclonal Antibody




Western blot analysis of lysates from A549 cells, treated with etoposide 25uM 24h, using MMP1 (Cleaved-Phe100) Antibody. The lane on the right is blocked with the synthesized peptide.