



MMP-12 Polyclonal Antibody

Catalog No	YP-Ab-02679
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	MMP12
Protein Name	Macrophage metalloelastase
Immunogen	The antiserum was produced against synthesized peptide derived from human MMP-12. AA range:362-411
Specificity	MMP-12 Polyclonal Antibody detects endogenous levels of MMP-12 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MMP12; HME; Macrophage metalloelastase; MME; Macrophage elastase; ME; hME; Matrix metalloproteinase-12; MMP-12
Observed Band	48kD
Cell Pathway	Secreted, extracellular space, extracellular matrix .
Tissue Specificity	Found in alveolar macrophages but not in peripheral blood monocytes.
Function	catalytic activity:Hydrolysis of soluble and insoluble elastin. Specific cleavages are also produced at 14-Ala- -Leu-15 and 16-Tyr- -Leu-17 in the B chain of insulin.,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.,function:May be involved in tissue injury and remodeling. Has significant elastolytic activity. Can accept large and small amino acids at the P1' site, but has a preference for leucine. Aromatic or hydrophobic residues are preferred at the P1 site, with small hydrophobic residues (preferably alanine) occupying P3.,induction:By exposure to lipopolysaccharide. Inhibited by dexamethasone.,similarity:Belongs to the p

**Background**

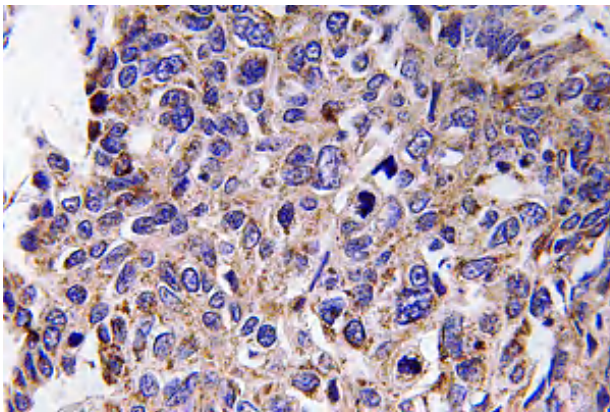
This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease degrades soluble and insoluble elastin. This gene may play a role in aneurysm formation and mutations in this gene are associated with lung function and chronic obstructive pulmonary disease (COPD). This gene is part of a cluster of MMP genes on chromosome 11. [provided by RefSeq, Jan 2016],

matters needing attention

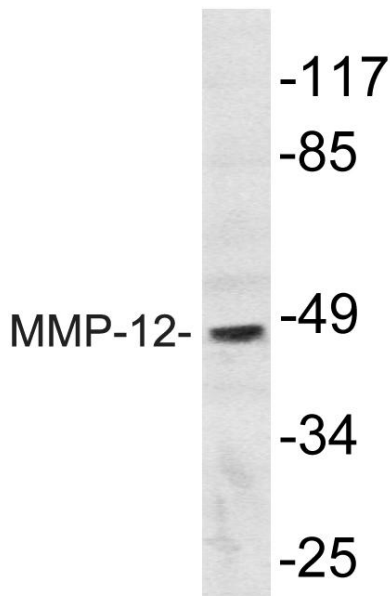
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

Immunohistochemistry analysis of MMP-12 antibody in paraffin-embedded human lung carcinoma tissue.



Western blot analysis of lysate from HepG2 cells, using MMP-12 antibody.