



MMP-3 Monoclonal Antibody

Catalog No	YP-mAb-02788
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	MMP3
Immunogen	The antiserum was produced against synthesized peptide derived from human MMP-3. AA range:421-470
Specificity	MMP-3 Monoclonal Antibody detects endogenous levels of MMP-3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:3.4.24.17;Matrix metalloproteinase-3;MMP 3;MMP-3;SL-1;MMP3;Stromelysin-1;STMY1;Transin-1
Observed Band	53kD
Calculated Molecular Weight	53kD
Cell Pathway	Secreted, extracellular space, extracellular matrix .
Tissue Specificity	Fibroblast,Lung,Synovium,
Function	catalytic activity:Preferential cleavage where P1', P2' and P3' are hydrophobic residues.,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:Can degrade fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and cartilage proteoglycans. Activates procollagenase.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,



Background

matrix metalloproteinase 3(MMP3) Homo sapiens Proteins of the matrix metalloproteinase (MMP) 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes an enzyme which degrades fibronectin, laminin, collagens III, IV, IX, and X, and cartilage proteoglycans. The enzyme is thought to be involved in wound repair, progression of atherosclerosis, and tumor initiation. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. [provided by RefSeq, Jul 2008],

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

