

## **MMP-8 Polyclonal Antibody**

Catalog No: YT2800

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: MMP-8

Gene Name: MMP8

Protein Name: Neutrophil collagenase

P22894

070138

Human Gene Id: 4317

**Human Swiss Prot** 

No:

Mouse Gene ld: 17394

**Mouse Swiss Prot** 

No:

Rat Gene ld: 63849

Rat Swiss Prot No: 088766

Immunogen: The antiserum was produced against synthesized peptide derived from human

MMP-8. AA range:418-467

**Specificity:** MMP-8 Polyclonal Antibody detects endogenous levels of MMP-8 protein.

**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. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



**Concentration**: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 55kD

**Cell Pathway:** Angiogenesis

**Background:** matrix metallopeptidase 8(MMP8) Homo sapiens This gene encodes a member

of the matrix metalloproteinase (MMP) family of proteins. These proteins are involved in the breakdown of extracellular matrix in embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Proteolysis at different sites on this protein results in multiple active forms of the enzyme with distinct N-termini. This protein functions in the degradation of type I, II and III collagens. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in

multiple transcript variants. [provided by RefSeg, Jan 2015],

**Function:** catalytic activity:Cleavage of interstitial collagens in the triple helical domain.

Unlike EC 3.4.24.7, this enzyme cleaves type III collagen more slowly than type I.,cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 3 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.,enzyme regulation:Cannot be activated without removal of the activation

peptide.,function:Can degrade fibrillar type I, II, and III

collagens., similarity: Belongs to the peptidase M10A family., similarity: Contains 4

hemopexin-like domains., subcellular location: Stored in intracellular

granules., tissue specificity: Neutrophils.,

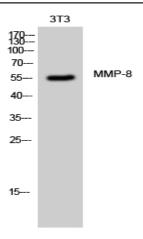
Subcellular Location:

Cytoplasmic granule. Secreted, extracellular space, extracellular matrix . Stored

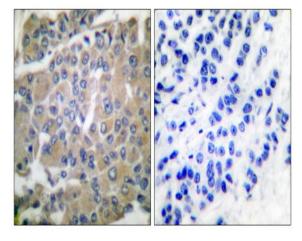
in intracellular granules.

**Expression :** Neutrophils.

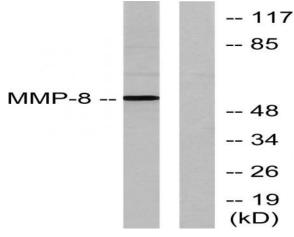
**Products Images** 



Western Blot analysis of 3T3 cells using MMP-8 Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using MMP-8 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, using MMP-8 Antibody. The lane on the right is blocked with the synthesized peptide.