

## Basic Information

Product Name	Anti-MMP2 Antibody	
Gene Name	MMP2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human MMP2 recombinant protein (Position: L411-C660).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	72 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

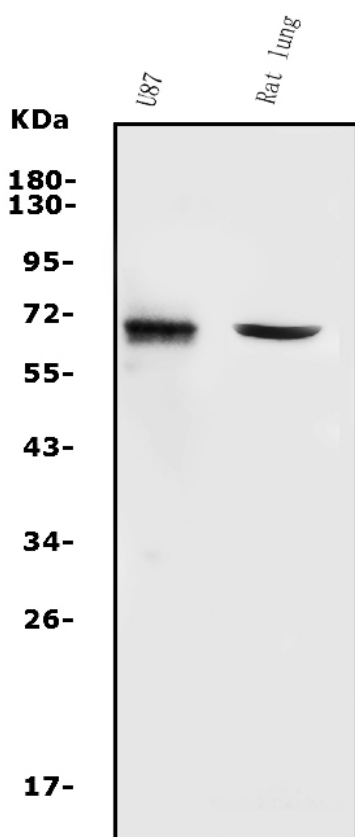
## Background Information

Matrix metalloproteinase-2 (MMP2) is a Type IV collagenase, 72-kD, which is also known as gelatinase and is a member of a group of secreted zinc metalloproteases. The MMP2 gene is 17 kb long with 13 exons varying in size from 110 to 901 bp and 12 introns ranging from 175 to 4,350 bp, located within a region of human chromosome 16q13. In addition, the extra exons encode the amino acids of the fibronectin-like domain which has so far been found in only the 72- and 92-kDa type IV collagenase. MMP2, which has a critical role in the binding of progelatinase A and TIMP4 via the C-terminal hemopexin-like domain (C domain), is functionally associated on the surface of angiogenic blood vessels. Not only is a likely effector of endometrial menstrual breakdown, MMP2 is also effector and regulator of the inflammatory response. Moreover, MMP2 could be helpful in diagnosing Takayasu arteritis.

## Reference

Anti-MMP2 Antibody被引用在94文献中。

## Selected Validation Data

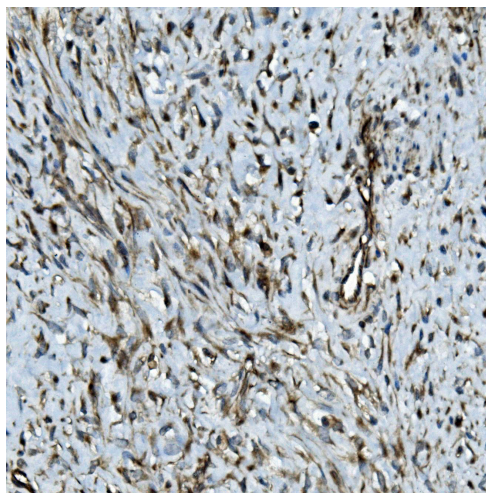


Western blot analysis of MMP2 using anti-MMP2 antibody (A00286-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

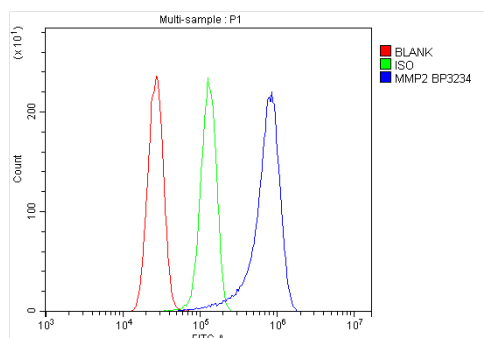
Lane 1: human U87 whole cell lysates,

Lane 2: Rat lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MMP2 antigen affinity purified polyclonal antibody (A00286-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for MMP2 at approximately 72 kDa. The expected band size for MMP2 is at 74 kDa.



IHC analysis of MMP2 using anti-MMP2 antibody (A00286-2). MMP2 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-MMP2 Antibody (A00286-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of U87 cells using anti-MMP2 antibody (A00286-2).

Overlay histogram showing U87 cells stained with A00286-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MMP2 Antibody (A00286-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.