

Basic Information

Product Name	Anti-MMP13 Antibody	
Gene Name	Mmp13	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived rat MMP13 recombinant protein (Position: Y99-H335).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	54 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	ELISA:	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

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

Collagenase 3 is an enzyme that in humans is encoded by the MMP13 gene. 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 cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. Mutations in this gene are associated with metaphyseal anadysplasia. This gene is part of a cluster of MMP genes on chromosome 11.

Reference

Anti-MMP13 Antibody被引用在25文献中。

Selected Validation Data

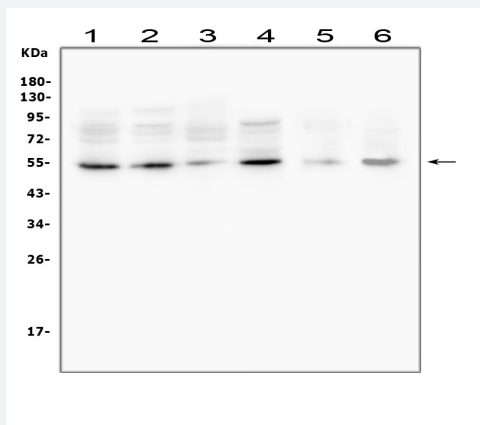


Figure 1. Western blot analysis of MMP13 using anti-MMP13 antibody (A00420-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,
Lane 2: human PC-3 whole cell lysates,
Lane 3: human U2OS whole cell lysates,
Lane 4: human HEK293 whole cell lysates,
Lane 5: rat testicular tissue lysates,
Lane 6: mouse testicular tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MMP13 antigen affinity purified polyclonal antibody (A00420-2) 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 MMP13 at approximately 54 kDa. The expected band size for MMP13 is at 54 kDa.

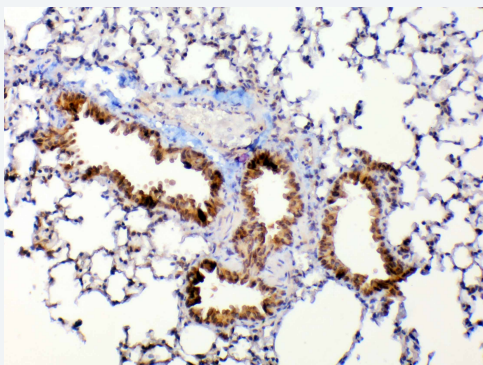


Figure 2. IHC analysis of MMP13 using anti-MMP13 antibody (A00420-2).

MMP13 was detected in a paraffin-embedded section of mouse lung tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-MMP13 Antibody (A00420-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.