

Basic Information

Product Name	Anti-MMP13 Antibody	
Gene Name	Mmp13	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg 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	54KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (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.

Selected Validation Data

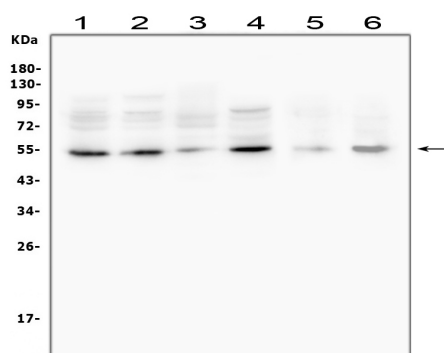


Figure 1. Western blot analysis of MMP13 using anti-MMP13 antibody (A00420-2).

The sample well of each lane was loaded with 50ug 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

probed with a goat anti-rabbit IgG-HRP secondary antibody . The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) A specific band was detected for MMP13 at approximately 54KD. The expected band size for MMP13 is at 54KD.

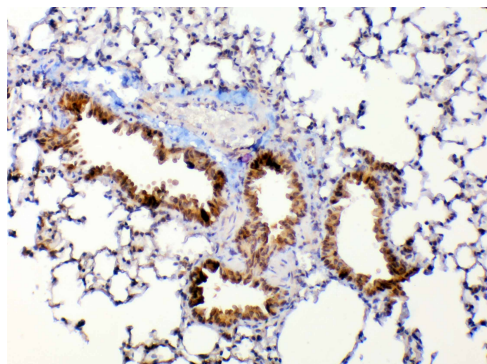


Figure 2. IHC analysis of MMP13 using anti-MMP13 antibody (A00420-2).MMP13 was detected in paraffin-embedded section of mouse lung tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.