

Anti-MMP13 Antibody Picoband®

Catalog Number: A00420-3

About MMP13

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.

Overview

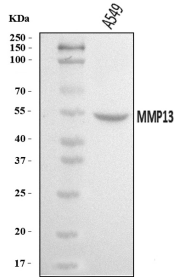
Product Name	Anti-MMP13 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-MMP13 Antibody Picoband® catalog # A00420-3. Tested in ELISA, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P45452

Technical Details

Immunogen	E.coli-derived human MMP13 recombinant protein (Position: K249-C471).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human ELISA, 0.1-0.5 ug/ml, -

Anti-MMP13 Antibody Picoband® (A00420-3) Images



Western blot analysis of MMP13 using anti-MMP13 antibody (A00420-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A549 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MMP13 antigen affinity purified polyclonal antibody (Catalog # A00420-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MMP13 at approximately 54 kDa. The expected band size for MMP13 is at 54 kDa.

3 Publications Citing This Product

1. PubMed ID: 10.1016/S1995-7645(14)60097-3, Effect of Rougan Huaqian granules combined with human mesenchymal stem cell transplantation on liver fibrosis in cirrhosis rats.
2. PubMed ID: 10.1002/jgm.1009, Modified synthetic siRNA targeting tissue inhibitor of metalloproteinase-2 inhibits hepatic fibrogenesis in rats
3. PubMed ID: 25150141, Fang L, Huang C, Meng X, Wu B, Ma T, Liu X, Zhu Q, Zhan S, Li J. Toxicol Appl Pharmacol. 2014 Oct 15;280(2):335-44. Doi: 10.1016/J.Taap.2014.08.006. Epub 2014 Aug 19. Tgf- β 1-Elevated Trpm7 Channel Regulates Collagen Expression In Hepatic Stellate...

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Anti-MMP13 Antibody

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