

Anti-MMP11 Antibody Picoband™

Catalog Number: A04490-1

About MMP11

Stromelysin-3 (SL-3) also known as matrix metalloproteinase-11 (MMP-11) is an enzyme that in humans is encoded by the MMP11 gene. Proteins of the matrix metalloproteinase (MMP) 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, the enzyme encoded by this gene is activated intracellularly by furin within the constitutive secretory pathway. Also in contrast to other MMP's, this enzyme cleaves alpha 1-proteinase inhibitor but weakly degrades structural proteins of the extracellular matrix.

Overview

Product Name	Anti-MMP11 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MMP11 Antibody Picoband™ catalog # A04490-1. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P24347

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MMP11, different from the related mouse and rat sequences by three amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
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	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p> <p>Western blot, 0.1-0.5ug/ml, Human, Rat</p>

Anti-MMP11 Antibody Picoband™ (A04490-1) Images

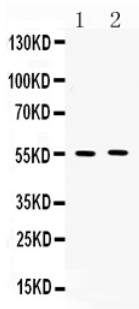


Figure 1. Western blot analysis of MMP11 using anti-MMP11 antibody (A04490-1).

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 50ug of sample under reducing conditions.

lane 1: rat spleen tissue lysate,

lane 2: MM231 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-MMP11 antigen affinity purified polyclonal antibody (Catalog # A04490-1) 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 1:10000 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 MMP11 at approximately 55KD. The expected band size for MMP11 is at 55KD.

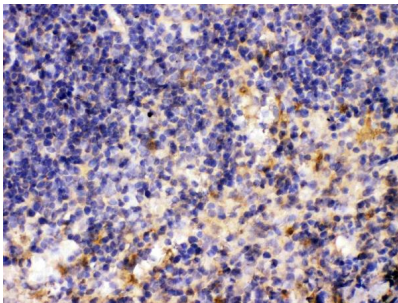


Figure 2. IHC analysis of MMP11 using anti-MMP11 antibody (A04490-1).

MMP11 was detected in paraffin-embedded section of mouse spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP11 Antibody (A04490-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

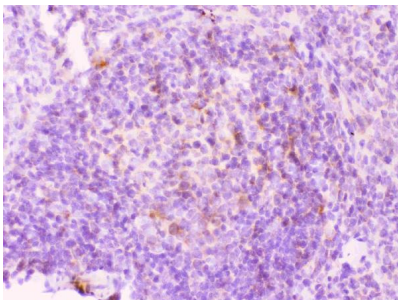
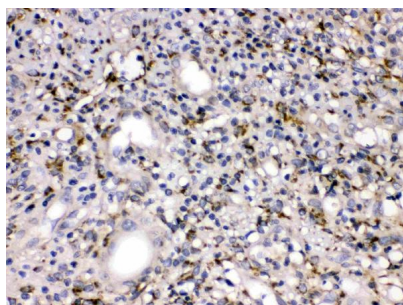


Figure 3. IHC analysis of MMP11 using anti-MMP11 antibody (A04490-1).

MMP11 was detected in paraffin-embedded section of rat spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP11 Antibody (A04490-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of MMP11 using anti-MMP11 antibody (A04490-1).

MMP11 was detected in paraffin-embedded section of human appendicitis tissues. Heat mediated antigen retrieval



was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP11 Antibody (A04490-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: 25887589, Zhang H, Teng X, Liu Z, Zhang L, Liu Z. J Exp Clin Cancer Res. 2015 Feb 12;34:16. Doi: 10.1186/S13046-015-0132-Y. Gene Expression Profile Analyze The Molecular Mechanism Of Cxcr7 Regulating Papillary Thyroid Carcinoma Growth And Metastasis.

Visit bosterbio.com/anti-mmp11-picoband-trade-antibody-a04490-1-boster.html to see all 1 publications.

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