

Anti-MMP8 Antibody Picoband®

Catalog Number: PB9726

About MMP8

MMP8 (Matrix metalloproteinase 8) is a member of the family of matrix metalloproteinases. It is distinct from the collagenase of skin fibroblasts and synovial cells in substrate specificity and immunologic crossreactivity. MMP8 is mapped to 11q21-q22. MMP8 is an enzyme that degrades fibrillar collagens imparting strength to the fetal membranes, is expressed by leukocytes and chorionic cytotrophoblast cells. The enzyme exhibits 58% homology to human fibroblast collagenase and has the same domain structure. It consists of a 20-residue signal peptide, and an 80-residue propeptide that is lost on autolytic activation by cleavage of an M-L bond. MMP8 was found to possess 57% identity with the deduced protein sequence for fibroblast collagenase with 72% chemical similarity. Matrix metalloproteinases (MMPs) have fundamental roles in tumor progression, but most clinical trials with MMP inhibitors have not shown improvements in individuals with cancer. MMP8 has a paradoxical protective role in cancer and provides a genetic model to evaluate the molecular basis of gender differences in cancer susceptibility.

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Overview

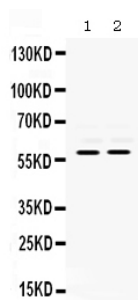
Product Name	Anti-MMP8 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-MMP8 Antibody Picoband® catalog # PB9726. Tested in ELISA, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high 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, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	P22894
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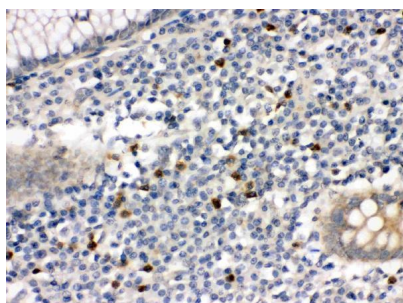
Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MMP-8, different from the related mouse sequence by eleven 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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human ELISA, 0.1-0.5ug/ml, - Western blot, 0.1-0.5ug/ml, Human

Anti-MMP8 Antibody Picoband® (PB9726) Images



Western blot analysis of MMP8 using anti-MMP8 antibody (PB9726). 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 40ug of sample under reducing conditions. Lane 1: K562 Whole Cell Lysate, Lane 2: JURKAT Whole Cell Lysate. 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-MMP8 antigen affinity purified polyclonal antibody (Catalog # PB9726) 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 MMP8 at approximately 60KD. The expected band size for MMP8 is at 53KD.



IHC analysis of MMP8 using anti-MMP8 antibody (PB9726). MMP8 was detected in paraffin-embedded section of Human Appendicitis Tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP8 Antibody (PB9726) 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.

5 Publications Citing This Product

1. PubMed ID: 31546991, Sustained Neurotrophin Release from Protein Nanoparticles Mediated by Matrix Metalloproteinases Induces the Alignment and Differentiation of Nerve Cells Yuka Matsuzaki,et al. Biomolecules. 2019 Oct; 9(10): 510. Published online 2019 Sep 20. doi: 10.339
2. PubMed ID: 25289023, Expression of matrix metalloproteinases-8 and -9 and their tissue inhibitor in the condyles of diabetic rats with mandibular advancement
3. PubMed ID: 19708869, Prevotella intermedia upregulates MMP-1 and MMP-8 expression in human periodontal ligament cells

Visit bosterbio.com/anti-mmp-8-picoband-trade-antibody-pb9726-boster.html to see all 5 publications.

Anti-MMP8 Antibody

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