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Anti-MMP-3 Antibody
Catalog # ABO11958

Specification

Anti-MMP-3 Antibody - Product Information

Application	**WB**
Primary Accession	P08254
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Stromelysin-1(MMP3) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MMP-3 Antibody - Additional Information

Gene ID 4314

Other Names
Stromelysin-1, SL-1, 3.4.24.17, Matrix metalloproteinase-3, MMP-3, Transin-1, MMP3, STMY1

Calculated MW
53977 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Secreted, extracellular space, extracellular matrix .

Protein Name
Stromelysin-1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminal of human MMP3(410-439aa RFDEKRNSMEPGFPKQIAEDFPGIDSKIDA), different from the related mouse sequence by seven amino acids, and from the related mouse sequence by ten amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the peptidase M10A family.

Anti-MMP-3 Antibody - Protein Information

Name MMP3

Synonyms STMY1

Function
Metalloproteinase with a rather broad substrate specificity that can degrade fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and cartilage proteoglycans. Activates different molecules including growth factors, plasminogen or other matrix metalloproteinases such as MMP9 (PubMed:11029580, PubMed:1371271). Once released into the extracellular matrix (ECM), the inactive pro-enzyme is activated by the plasmin cascade signaling pathway (PubMed:2383557). Acts also intracellularly (PubMed:22265821). For example, in dopaminergic neurons, gets activated by the serine protease HTRA2 upon stress and plays a pivotal role in DA neuronal degeneration by mediating microglial activation and alpha- synuclein/SNCA cleavage (PubMed:21330369). In addition, plays a role in immune response and possesses antiviral activity against various viruses such as vesicular stomatitis virus, influenza A virus (H1N1) and human herpes virus 1 (PubMed:35940311). Mechanistically, translocates from the cytoplasm into the cell nucleus upon virus infection to influence NF-kappa-B activities (PubMed:35940311).

Cellular Location
Secreted, extracellular space, extracellular matrix. Nucleus. Cytoplasm

Anti-MMP-3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MMP-3 Antibody - Images

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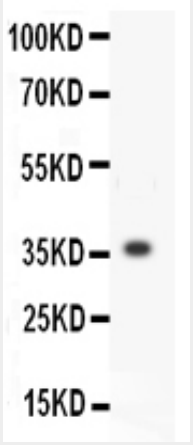
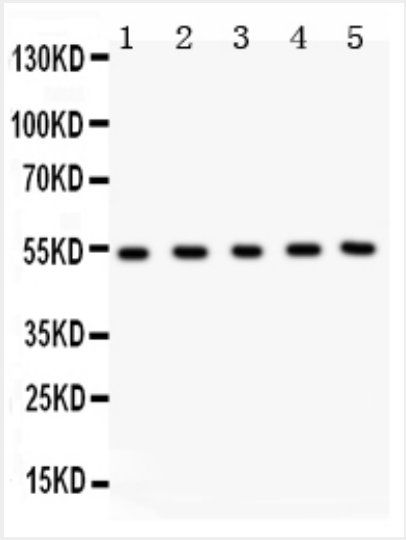


Anti- MMP3 Picoband antibody, ABO11958, Western blottingAll lanes: Anti MMP3 (ABO11958) at 0.5ug/mlWB: Recombinant Human MMP3 Protein 0.5ngPredicted bind size: 36KDObserved bind size: 36KD



Anti- MMP3 Picoband antibody, ABO11958, Western blottingAll lanes: Anti MMP3 (ABO11958) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: U20S Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: PANC Whole Cell Lysate at 40ugLane 5: COLO320 Whole Cell Lysate at 40ugPredicted bind size: 54KDObserved bind size: 54KD

Anti-MMP-3 Antibody - Background

Stromelysin-1, also known as matrix metalloproteinase-3 (MMP-3), is an enzyme that in humans is encoded by the MMP3 gene. It is mapped to 11q22.2. Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix and during tissue remodeling in normal physiological processes, such as embryonic development and reproduction, as well as in disease processes, such as arthritis, and tumour metastasis. The MMP-3 enzyme degrades collagen types II, III, IV, IX, and X, proteoglycans, fibronectin, laminin, and elastin. In addition, MMP-3 can also activate other MMPs such as MMP-1, MMP-7, and MMP-9, rendering MMP-3 crucial in connective tissue remodeling. The enzyme is thought to be involved in wound repair, progression of atherosclerosis, and tumor initiation.