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Anti-MMP-3 Antibody

Catalog # ABO11958

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.

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
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted, extracellular space, extracellular matrix .
Source	Eukaryota
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.

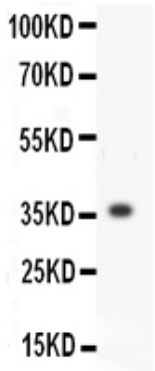
Protein Information

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). Also acts 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

Background

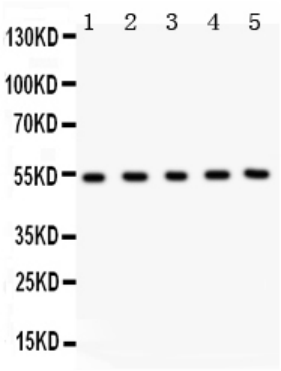
Stromelysin-1, also known as matrix metalloproteinase-3 (MMP-3), is an enzyme that in humans is encoded by the MMP3 gene. It is mapped to 11q22.2. Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix and during tissue remodeling in normal physiological 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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.