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MMP3 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13536a

Specification

MMP3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P08254

MMP3 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 4314

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13536a was selected from the N-term region of MMP3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MMP3 Antibody (N-term) Blocking peptide - 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

MMP3 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

MMP3 Antibody (N-term) Blocking peptide - Images

MMP3 Antibody (N-term) Blocking peptide - Background

Proteins of the matrix metalloproteinase (MMP) family areinvolved in the breakdown of extracellular matrix in normalphysiological processes, such as embryonic development,reproduction, and tissue remodeling, as well as in diseaseprocesses, such as arthritis and metastasis. Most MMP's aresecreted as inactive proproteins which are activated when cleavedby extracellular proteinases. This gene encodes an enzyme whichdegrades fibronectin, laminin, collagens III, IV, IX, and X, andcartilage proteoglycans. The enzyme is thought to be involved inwound repair, progression of atherosclerosis, and tumor initiation.The gene is part of a cluster of MMP genes which localize tochromosome 11q22.3.

MMP3 Antibody (N-term) Blocking peptide - References

Fallah, S., et al. J. Physiol. Biochem. 66(4):359-364(2010)Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :Nikopensius, T., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(9):748-756(2010)Skorupski, P., et al. Ginekol. Pol. 81(8):594-599(2010)Yeh, Y.C., et al. BMC Microbiol. 10, 218 (2010) :