

MMP3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51355

Product Information

Application	WB, IP
Primary Accession	P08254
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53977

Additional Information

Gene ID	4314
Other Names	Stromelysin-1, SL-1, Matrix metalloproteinase-3, MMP-3, Transin-1, MMP3, STMY1
Dilution	WB~~1:1000 IP~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	MMP3
Synonyms	STMY1
Function	<p>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).</p>

Cellular Location

Secreted, extracellular space, extracellular matrix. Nucleus. Cytoplasm

Background

Can degrade fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and cartilage proteoglycans. Activates procollagenase.

References

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Whitham S.E., et al. *Biochem. J.* 240:913-916(1986).

Wilhelm S.M., et al. *Proc. Natl. Acad. Sci. U.S.A.* 84:6725-6729(1987).

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Ota T., et al. *Nat. Genet.* 36:40-45(2004).

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