

# MMP3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP51354

## Product Information

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<b>Application</b>	WB, ICC, IHC-P
<b>Primary Accession</b>	<a href="#">P08254</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	53977

## Additional Information

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<b>Gene ID</b>	4314
<b>Other Names</b>	Stromelysin-1, SL-1, Matrix metalloproteinase-3, MMP-3, Transin-1, MMP3, STMY1
<b>Target/Specificity</b>	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human MMP3. The exact sequence is proprietary.
<b>Dilution</b>	WB~~1:1000 ICC~~N/A IHC-P~~N/A
<b>Format</b>	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
<b>Storage</b>	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

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<b>Name</b>	MMP3
<b>Synonyms</b>	STMY1
<b>Function</b>	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: <a href="#">11029580</a> , PubMed: <a href="#">1371271</a> ). Once released into the extracellular matrix (ECM), the inactive pro-enzyme is activated by the plasmin cascade signaling pathway (PubMed: <a href="#">2383557</a> ). Also acts intracellularly (PubMed: <a href="#">22265821</a> ). 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: <a href="#">21330369</a> ). 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

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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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Saus J., et al. J. Biol. Chem. 263:6742-6745(1988).  
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).  
Lin D., et al. Submitted (DEC-1996) to the EMBL/GenBank/DDBJ databases.  
Ota T., et al. Nat. Genet. 36:40-45(2004).

## Citations

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- [Nkx2-5 Is Expressed in Atherosclerotic Plaques and Attenuates Development of Atherosclerosis in Apolipoprotein E-Deficient Mice.](#)
- [Metalloproteinases 1 and 3 as Potential Biomarkers in Breast Cancer Development.](#)

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