

### MMP-3 Antibody

Purified Goat Polyclonal Antibody Catalog # ABV11536

### **Specification**

## **MMP-3 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Isotype

P08254
Human, Mouse, Rat
Goat
Polyclonal
Goat IgG
53977

WB, IHC, IP

# **MMP-3 Antibody - Additional Information**

#### **Gene ID 4314**

Calculated MW

#### **Other Names**

 ${\sf STR1}$  ,  ${\sf MGC126102}$  ,  ${\sf STMY1}$  ,  ${\sf Transin-1}$  ,  ${\sf MGC126102}$  ,  ${\sf MGC126103}$  ,  ${\sf MGC126104}$  , EC 3.4.24.17 ,  ${\sf SL-1}$  ,  ${\sf Matrix}$  metalloproteinase

# **Target/Specificity**

MMP-3

#### **Formulation**

100 μg (0.5 mg/ml) antigen affinity purified goat polyclonal antibody in phosphate-buffered saline (PBS) containing 50% glycerol, 1% BSA, and 0.02% sodium azide.

#### Handling

The antibody solution should be gently mixed before use.

#### **Background Descriptions**

### **Precautions**

MMP-3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **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:<a href="http://www.uniprot.org/citations/11029580" target=" blank">11029580</a>, PubMed:<a href="http://www.uniprot.org/citations/1371271" target="blank">1371271</a>). Once released into the extracellular matrix (ECM), the inactive pro-enzyme is activated by the plasmin cascade signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/2383557" target="\_blank">2383557</a>). Acts also intracellularly (PubMed: <a href="http://www.uniprot.org/citations/22265821" target=" blank">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="http://www.uniprot.org/citations/21330369" target="\_blank">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: <a href="http://www.uniprot.org/citations/35940311" target="blank">35940311</a>). Mechanistically, translocates from the cytoplasm into the cell nucleus upon virus infection to influence NF-kappa-B activities (PubMed: <a href="http://www.uniprot.org/citations/35940311" target=" blank">35940311</a>).

#### **Cellular Location**

Secreted, extracellular space, extracellular matrix. Nucleus. Cytoplasm

### **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

# MMP-3 Antibody - Images

## MMP-3 Antibody - Background

The matrix metalloproteinases (MMP) are a family of peptidase enzymes responsible for the degradation of extracellular matrix components, including collagen, gelatin, fibronectin, laminin and proteoglycan. Transcription of MMP genes is differentially activated by phorbol ester, lipopolysaccharide (LPS) or staphylococcal enterotoxin B (SEB). MMP catalysis requires both calcium and zinc. MMP-3, MMP-10, and MMP-11 activates procollagenase.