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# MMP9 Antibody
## MMP9 Antibody, Clone S51-82
## Catalog # ASM10230

## Specification

### MMP9 Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | P50282 |
| Other Accession | NP_112317.1 |
| Host | **Mouse** |
| Isotype | **IgG2a** |
| Reactivity | **Human, Mouse, Rat** |
| Clonality | **Monoclonal** |

**Description**
Mouse Anti-Rat MMP9 Monoclonal IgG2a

**Target/Specificity**
Detecs ~92kDa and ~82kDa (pro and active forms).

**Other Names**
MMP-9 Antibody, CLG4B Antibody, 82kDa matrix metalloproteinase-9 Antibody, collagenease type 4 beta Antibody, GELB Antibody, Macrophage gelatinase Antibody, MANDP2 Antibody, Type V collagenase Antibody, 92 kDa gelatinase Antibody, 92 kDa type IV collagenase Antibody, Gelatinase B Antibody, MMP9 Antibody, Matrix metalloproteinase 9 Antibody

**Immunogen**
Fusion protein amino acids 1-708 (full length) of rat MMP9

**Purification**
Protein G Purified

| | |
|---|---|
| Storage | **-20ºC** |

**Storage Buffer**
PBS pH7.4, 50% glycerol, 0.09% sodium azide

| | |
|---|---|
| Shipping Temperature | **Blue Ice or 4ºC** |

**Certificate of Analysis**
1 µg/ml of SMC-396 was sufficient for detection of MMP9 in 20 µg of COS-1 cells (lysate) transfected with human MMP9 by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**
Extracellular Matrix

### MMP9 Antibody - Protocols

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

- Western Blot

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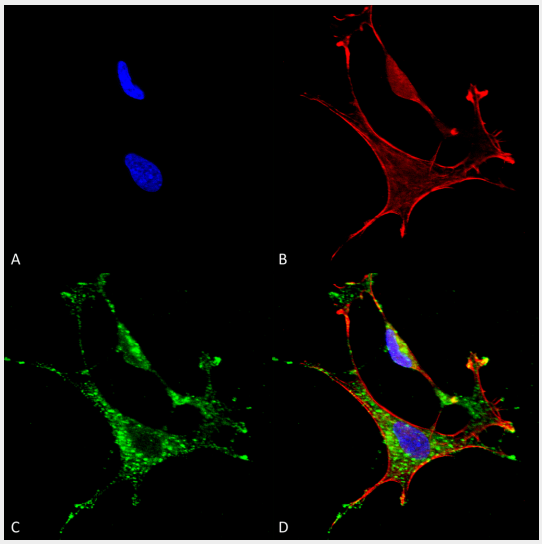
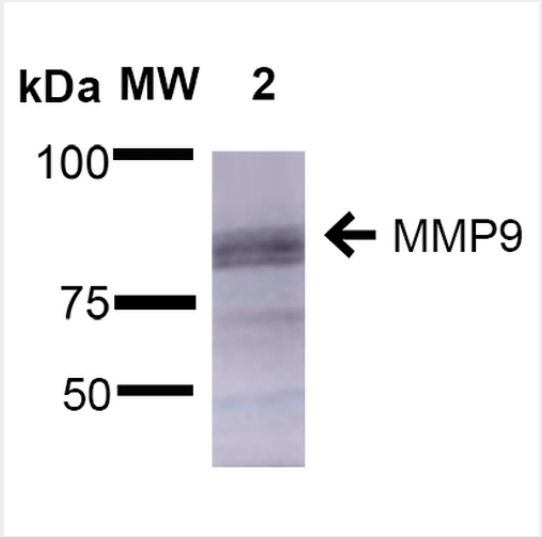
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**MMP9 Antibody - Images**




Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-MMP9 Monoclonal Antibody, Clone L51/82 (ASM10230). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-MMP9 Monoclonal Antibody (ASM10230) at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) MMP9 Antibody (D) Composite.




Western Blot analysis of Rat Brain showing detection of ~92 kDa and ~82 kDa (pro and active) MMP9 protein using Mouse Anti-MMP9 Monoclonal Antibody, Clone L51/82 (ASM10230). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Brain. Load: 15 µg. Block: 5% Skim Milk in 1X TBST.

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Primary Antibody: Mouse Anti-MMP9 Monoclonal Antibody (ASM10230) at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min at RT. Predicted/Observed Size: ~92 kDa and ~82 kDa (pro and active).

## MMP9 Antibody - Background

MMP9, otherwise known as matrix metalloproteinase 9, is involved in the breakdown of extracellular matrix in normal physiological processes such as embryonic development, reproduction and tissue remodeling, as well as in disease processes like arthritis and metastasis (1). Among the family members, MMP-2, MMP-3, MMP-7 and MMP-9 have been characterized as important factors for normal tissue remodeling during embryonic development, wound healing, tumor invasion, angiogenesis, carcinogenesis and apoptosis (2-4). MMP activity correlates with cancer development (2). One mechanism of MMP regulation is transcriptional (5). Once synthesized, MMP exists as a latent proenzyme. Maximum MMP activity requires proteolytic cleavage to generate active MMPs by releasing the inhibitory propeptide domain from the full length protein (5).

## MMP9 Antibody - References

1. Hirose Y., et al. (2008) Am J Hum Genet. 82(5): 1122-1129.
2. Coussens L.M., et al. (2002) Science 295: 2387-2391.
3. Sternlicht M.D., et al. (1999) Cell 98: 137-146.
4. Vu T.H., et al. (1998) Cell 93: 411-422.
5. Nagase H., et al. (1990) Biochemistry 29: 5783-5789.