

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human and mouse MMP-9 in Western blots, dot blots, and human MMP-9 by immunocytochemistry. In Western blots, less than 1% cross-reactivity with recombinant human MMP-1, -2, -3, -7, -8, -10, -12, and -13 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human MMP-9
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

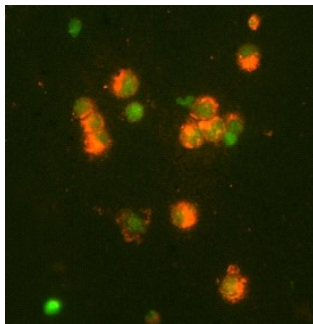
#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human MMP-9 Western Blot Standard (Catalog # <a href="#">WBC018</a> )
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human MMP-9 (Catalog # <a href="#">911-MP</a> ), see our available <a href="#">Western blot detection antibodies</a>

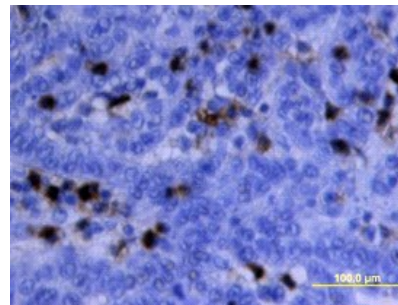
#### DATA

##### Immunocytochemistry



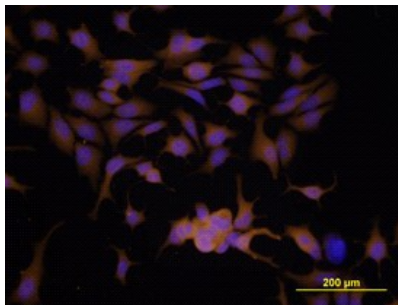
**MMP-9 in NS0 Mouse Cell Line.** MMP-9 was detected in immersion fixed NS0 mouse myeloma cell line transfected with MMP-9 using 5 µg/mL Human MMP-9 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF911) for 3 hours at room temperature. Cells were stained (red) and counterstained (green). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

##### Immunohistochemistry



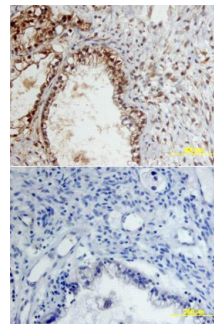
**MMP-9 in Human Ovarian Cancer Tissue.** MMP-9 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Human MMP-9 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF911) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # [CTS008](#)) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

##### Immunocytochemistry



**MMP-9 in MCF-7 Human Cell Line.** MMP-9 was detected in immersion fixed MCF-7 human breast cancer cell line using Human MMP-9 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF911) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # [NL001](#)) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

##### Immunohistochemistry



**MMP-9 in Human Ovarian Cancer Tissue.** MMP-9 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Human MMP-9 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF911) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # [CTS008](#)) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

**Reconstitution** Reconstitute at 0.2 mg/mL in sterile PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  
\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

Pro-MMP-9 is an inactive proenzyme secreted by multiple cell types. The N-terminal pro region is proteolytically removed, resulting in active MMP-9 which can degrade collagens and elastin as well as several non-ECM molecules.