

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse MMP-9 in Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human (rh) MMP-9 is observed and less than 1% cross-reactivity with rhMMP-1, -3, -7, -8, -10, -12, and -13 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse MMP-9 (R&D Systems, Catalog # 909-MM) Ala20-Pro730 Accession # P41245
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

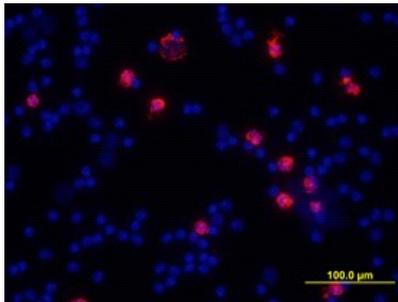
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse MMP-9 (Catalog # 909-MM)
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	Perfusion fixed frozen sections of mouse ovary and thymus

DATA

Immunocytochemistry



MMP-9 in Mouse Splenocytes.

MMP-9 was detected in immersion fixed mouse splenocytes using Goat Anti-Mouse MMP-9 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF909) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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

Matrix metalloproteinases are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. MMP-9 (gelatinase B) can degrade a broad range of substrates including gelatin, collagen types IV and V, elastin, and proteoglycan core protein. It is believed to act synergistically with interstitial collagenase (MMP-1) in the degradation of fibrillar collagens as it degrades their denatured gelatin forms. MMP-9 is produced by keratinocytes, monocytes, macrophages, and PMN leukocytes. MMP-9 is present in most cases of inflammatory responses. Structurally, MMP-9 may be divided into five distinct domains: a pro-domain which is cleaved upon activation, a gelatin-binding domain consisting of three contiguous fibronectin type II units, a catalytic domain containing the zinc binding site, a proline-rich linker region, and a carboxyl terminal hemopexin-like domain. Compared to the human MMP-9 (Catalog # 911-MP), the mouse enzyme contains extra sequences in the linker region and in the hemopexin-like domain, respectively.