

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant mouse MMP-9 protein in Direct ELISA.
Source	Monoclonal Mouse IgG Clone # 526501
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MMP-9 Ala20-Asp707 (Gln279Arg) Accession # P14780
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

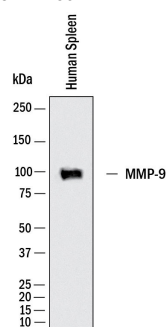
APPLICATIONS

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	2 µg/mL	Human spleen
Simple Western	10-50 µg/mL	Human spleen

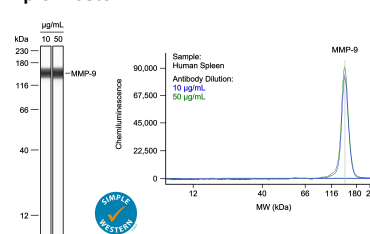
DATA

Western Blot



Detection of Human MMP-9 by Western Blot. Western Blot shows lysates of human spleen tissue. PVDF membrane was probed with 2 µg/ml of Mouse Anti-Human MMP-9 Monoclonal Antibody (Catalog # MAB11756) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for MMP-9 at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

Simple Western



Detection of Human MMP-9 by Simple Western™. Left: Simple Western lane view shows lysates of human spleen, loaded at 0.5 mg/ml. A specific band was detected for MMP-9 at approximately 150 kDa (as indicated) using both 10 µg/ml and 50 µg/ml of Mouse Anti-Human MMP-9 Monoclonal Antibody (Catalog # MAB11756) followed by HRP-conjugated Goat Anti-Mouse Secondary Antibody (Catalog # 042-205). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Right: Simple Western electropherogram showing the same Mouse Anti-Human MMP-9 Monoclonal Antibody (Catalog # MAB11756) tested at 10 µg/ml (blue line) and 50 µg/ml (green line) in the human spleen.

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
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

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 maybe 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.