

DESCRIPTION

Species Reactivity	Human
Specificity	Detects the pro and active forms of human MMP-10 in direct ELISAs Western blots. In direct ELISAs and Western blots, approximately 10-50% cross-reactivity with recombinant human (rh) MMP-3 and no cross-reactivity with rhMMP-1, -2, -7, -8, -9, -12, or -13 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 110316
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MMP-10 Phe99-Cys476 Accession # P09238
Formulation	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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human MMP-10 Western Blot Standard (Catalog # WBC026)
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human liver cancer tissue
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human MMP-10 (Catalog # 910-MP), see our available Western blot detection antibodies
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	MG-63 human osteosarcoma cell line fixed with paraformaldehyde and permeabilized with saponin

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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. <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-10 (stromelysin 2) degrades a broad range of substrates including gelatin, collagen types III, IV and V, fibronectin, aggrecan, and pig cartilage proteoglycan. MMP-10 can activate other MMPs such as MMP-1 and MMP-8. MMP-10 is expressed in keratinocytes, T cells, menstrual endometrium and a few tumor samples. Structurally, MMP-10 may be divided into four distinct domains: a pro-domain which is cleaved upon activation, a catalytic domain containing the zinc binding site; a short linker region, and a carboxyl terminal hemopexin-like domain.