

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MMP-7 in ELISAs. In sandwich immunoassays, no cross-reactivity or interference with recombinant human (rh) MMP-1, 2, 3, 8, 9, 10, 13, recombinant mouse MMP-7, 9, rhTIMP-1, 2, 3, or 4 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 111439
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MMP-7 Leu18-Lys267 (Ala230del) Accession # NP_002414
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.

Human MMP-7 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human MMP-7 Antibody (Catalog # MAB9072)
ELISA Detection	0.1-0.4 µg/mL	Human MMP-7 Biotinylated Antibody (Catalog # BAF907)
Standard		Recombinant Human MMP-7 (Catalog # 907-MP)

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 (MMPs) are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. MMP-7 (matrilysin) is expressed in epithelial cells of normal and diseased tissues, and is capable of digesting a large series of proteins of the extracellular matrix including collagen IV and X, gelatin, casein, laminin, aggrecan, entactin, elastin and versican. MMP-7 is implicated in the activation of other proteinases such as plasminogen, MMP-1, MMP-2, and MMP-9. In addition to its roles in connective tissue remodeling and cancer, MMP-7 also regulates intestinal α -defensin activation in innate host defense, releases tumor necrosis factor- α in a model of herniated disc resorption, and cleaves FasL to generate a soluble form in a model of prostate involution. Structurally, MMP-7 is the smallest of the MMPs and consists of two domains: a pro-domain that is cleaved upon activation and a catalytic domain containing the zinc-binding site.