

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MMP-7 in sandwich ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 1036221
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived human MMP-7 Leu18-Lys267 Accession # P09237
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

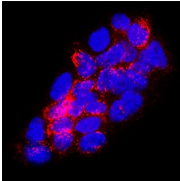
APPLICATIONS

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.

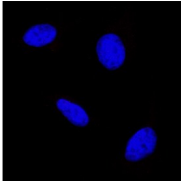
	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	Immersion fixed Capan-1 human pancreatic adenocarcinoma cell line
ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human MMP-7 Monoclonal Antibody (Catalog # MAB9073). This product is intended for assay development on various assay platforms requiring antibody pairs.	

DATA

Immunocytochemistry



Positive (CAPAN-2 cells)



Negative (HeLa cells)

MMP-7 in Capan-1 Human Cell Line. MMP-7 was detected in immersion fixed Capan-1 human pancreatic adenocarcinoma cell line (positive staining) and HeLa human cervical epithelial carcinoma cell line (negative control) using Mouse Anti-Human MMP-7 Monoclonal Antibody (Catalog # MAB9074) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for Fluorescent ICC Staining of Non-adherent Cells.

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.