

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse MMP-3 in Western blots. In this format, less than 2% cross-reactivity with recombinant human (rh) MMP-3, rhMMP-1, rhMMP-2, rhMMP-7, rhMMP-8, rhMMP-9, rhMMP-10, rhMMP-12, rhMMP-13, and recombinant mouse MMP-9 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse MMP-3 (R&D Systems, Catalog # 548-MM) Tyr18-Cys477 Accession # P28862
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-3 (Catalog # 548-MM)

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-3 (stromelysin-1) can degrade a broad range of substrates including collagen α-chains, aggrecan, laminin, fibronectin, elastin, casein, α-1 antitrypsin, myelin basic protein, IL-1β, IGFBP-3, pro-MMP-1, pro-MMP-7, pro-MMP-8, pro-MMP-9, and pro-MMP-13. MMP-3 does not cleave the triple helical region of interstitial collagens, a characteristic which distinguishes the stromelysins from the collagenases. The MMP-3 substrate repertoire extends beyond extracellular matrix proteins and implicates MMP-3 in roles other than direct tissue remodeling, for instance, enzyme cascades and cytokine regulation. MMP-3 is expressed by fibroblasts, chondrocytes, osteoblasts, endothelial cells, smooth muscle cells, and macrophages. Structurally, MMP-3 may be divided into several distinct domains, a pro-domain which is cleaved upon activation, a catalytic domain containing the zinc binding site, a short hinge region, and a carboxyl terminal (hemopexin-like) domain.