

MMP-1 Polyclonal Antibody

catalog number: D-AB-10358L

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

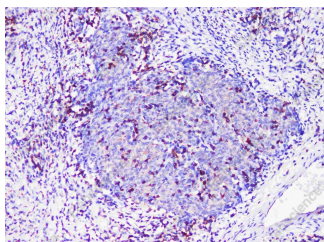
Reactivity	Human
Immunogen	Recombinant Human MMP-1 protein expressed by E.coli
Host	Rabbit
Isotype	Rabbit IgG
Purification	Antigen Affinity Purification
Buffer	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

Applications

Recommended Dilution

IHC	1:300-1:600
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Data



Immunohistochemistry of paraffin-embedded Human cervical cancer using MMP-1 Polyclonal Antibody at dilution of 1:300.

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

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-1 (interstitial collagenase), can degrade a broad range of substrates including types I, II, III, VII, VIII, and X collagens as well as casein, gelatin, alpha -1 antitrypsin, myelin basic protein, L-Selectin, pro-TNF, IL-1 beta, IGFBP-3, IGFBP-5, pro-MMP-2, and pro-MMP-9. A significant role of MMP-1 is the degradation of fibrillar collagens in extracellular matrix remodeling, characterized by the cleavage of the interstitial collagen triple helix into $\frac{3}{4}$, $\frac{1}{4}$ fragments. However, as the list of substrates above illustrates, the role of MMP-1 is more diverse than originally envisaged, and may involve enzyme cascades, cytokine regulation, and cell surface molecule modulation. MMP-1 is expressed by fibroblasts, keratinocytes, endothelial cells, monocytes, and macrophages. Structurally, MMP-1 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.

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