



A Reliable Research Partner in Life Science and Medicine

# **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 IgG

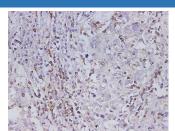
**Purification** Antigen Affinity Purification

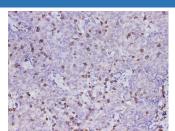
**Buffer** PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

Applications Recommended Dilution

IHC 1:300-1:600

#### Data





Immunohistochemistry of paraffin-embedded Human lung Immunohistochemistry of paraffin-embedded Human cancer using MMP-1 Polyclonal Antibody at dilution of 1:600 cervical cancer using MMP-1 Polyclonal Antibody at dilution of 1:600

## **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 (hemopexi n-like) domain.

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