

## MMP1 (Cleaved-Ile271) Rabbit Polyclonal Antibody

### Description

<b>Product type</b>	Primary Antibody
<b>Code</b>	BT-AP03630
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Size</b>	100ul, 50ul, 20ul
<b>Immunogen</b>	Synthesized peptide derived from human MMP1 (Cleaved-Ile271)
<b>Mol wt</b>	51590
<b>Species reactivity</b>	Human, Rat, Mouse
<b>Clonality</b>	Polyclonal
<b>Recommended application</b>	WB, ELISA
<b>Concentration</b>	1 mg/ml
<b>Full name</b>	MMP1
<b>Synonyms</b>	MMP1 ;Cleaved-Ile271; Interstitial collagenase; EC 3.4.24.7; Fibroblast collagenase; Matrix metalloproteinase-1; MMP-1; 22 kDa interstitial collagenase; 27 kDa interstitial collagenase;

**This product is for research use only, not for use in human, therapeutic or diagnostic procedure.**

### Background

Catalytic activity: Cleavage of the triple helix of collagen at about three-quarters of the length of the molecule from the N-terminus at 775-Gly-Ile-776 in the alpha-1(I) chain. Cleaves synthetic substrates and alpha-macroglobulins at bonds where P1' is a hydrophobic residue. cofactor: Binds 2 zinc ions per subunit. cofactor: Binds 4 calcium ions per subunit. The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme. There are two distinct domains in this protein; the catalytic N-terminal and the C-terminal which is involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases). enzyme regulation: Can be activated without removal of the activation peptide. Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein leading to a decrease in neuronal Tat's mediated neurotoxicity. online information: Collagenase entry PTM: Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase. Belongs to the peptidase M10A family. Contains 4 hemopexin-like domains. subunit: Interacts with HIV-1 Tat.

### Recommended Dilution

WB: 1: 1000 - 1: 2000

ELISA: 1: 5000 - 1: 20000

Not yet tested in other applications.

### Images

No images.

### Storage

-20°C for 1 year