

## Product datasheet

# Recombinant Human MMP1 protein ab158902

1 Image

### Overview

<b>Product name</b>	Recombinant Human MMP1 protein
<b>Protein length</b>	Full length protein

### Description

<b>Nature</b>	Recombinant
<b>Source</b>	Wheat germ
<b>Amino Acid Sequence</b>	
<b>Species</b>	Human

<b>Sequence</b>	<p>MHSFPPLLLLLFWGVVSHSFPATLETQEQDVDLVQKY          LEKYNLKNDGRQ          VEKRRNSGPVVEKLGKQMQEFFGLKVTGKPDATLKV          MKQPRCGVPDVAQF          VLTEGNPRWEQTHLTYRIENYTPDLPRADVDHAIKAF          QLWSNVTPLTFT          KVSEGGADIMISFVRGDHRDNSPFDGPGGNLAHAFQP          GPGIGGDAHFDDED          ERWTNNFREYNLHRVAAHELGHSLGLSHSTDIGALMY          PSYTFSGDVQLAQ          DDIDGIQAIYGRSQNPVQPIGPQTPKACDSKLTFDAITTI          RGEVMFFKDR          FYMRTNPFYPEVELNFISVFWPQLPNGLEAAYEFADR          DEVRFFKGNKYWA          VQQQNVLHGYPKDIYSSFGFPRTVKHIDAALSEENTGK          TYFFVANKYWRY          DEYKRSMDPGYPKMAHDFPGIGHKVDVFMKDGFFY          FFHGTRQYKFDPK TKRILTLQKANSWFNCRKN</p>
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<b>Amino acids</b>	1 to 469
<b>Tags</b>	proprietary tag N-Terminus

### Specifications

Our [Abpromise guarantee](#) covers the use of **ab158902** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	ELISA Western blot
<b>Form</b>	Liquid
<b>Additional notes</b>	Protein concentration is above or equal to 0.05 mg/ml.

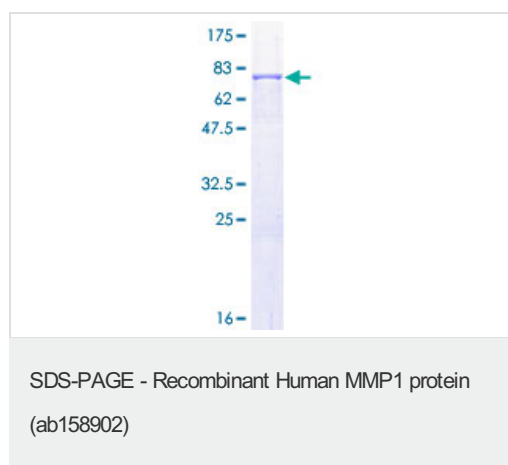
## Preparation and Storage

<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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## General Info

<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the peptidase M10A family. Contains 4 hemopexin-like domains.
<b>Domain</b>	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). 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.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Secreted > extracellular space > extracellular matrix.

## Images



ab158902 on a 12.5% SDS-PAGE stained with Coomassie Blue.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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