

MMP12 Human

Matrix Metalloproteinase 12 Human Recombinant
ENZ0858

Product Overview

Name MMP12 Human

Description

Matrix Metalloproteinase 12 Human Recombinant

Accession (Primary) [P39900](#)

Source

Escherichia Coli.

Physical Appearance

Filtered White lyophilized (freeze-dried) powder.

Formulation

Each mg was lyophilized with 1xPBS, 0.4% SDS and 4mM DTT.

Stability

Store lyophilized MMP12 at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles.

Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

Purity

Greater than 90% as determined by SDS-PAGE.

Amino acid sequence

MKFLILLLLQ ATASGALPLN SSTSLKNNV LFG.

Solubility

It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it on cell culture.

Background

Matrix Metalloproteinase 12 also known as MMP12 is 1 of the main enzymes in the MMP family which is primarily produced by macrophages and neutrophils. MMP12 is implicated in the breakdown of elastin and in the development of chronic inflammatory diseases, such as emphysema, COPD and atherosclerosis. MMP12 is upregulated and contributes to tissue remodeling in inflammatory responses which is essential for wound healing and immune defense. MMP12 catalyzes the cleavage of collagen, elastin and other ECM components. Its activity is regulated in normal

tissues to avoid pathological degradation.

Precautions

MMP12 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: ([P39900](#))

Background

MMPs are a family of zinc-dependent enzymes which take part in the degradation of the extracellular matrix. These enzymes are involved in various physiological processes, including wound healing, tissue remodeling, immune response and embryogenesis. Matrix Metalloproteinase 12 also known as MMP12 is 1 of the main enzymes in the MMP family which is primarily produced by macrophages and neutrophils. MMP12 is implicated in the breakdown of elastin and in the development of chronic inflammatory diseases, such as emphysema, COPD and atherosclerosis. MMP12 is a key enzyme in the degradation of the extracellular matrix, especially elastin which provides structural integrity to tissues like the skin, lungs and blood vessels. MMP12 catalyzes the cleavage of collagen, elastin and other ECM components. Its activity is regulated in normal tissues to avoid pathological degradation.