

Human CellExp MMP-1, human recombinant protein
MMP1, CLG, CLGN
Catalog # PBV10874r**Specification**

Human CellExp MMP-1, human recombinant protein - Product infoPrimary Accession
Calculated MW[P03956](#)

This protein is fused with 6×His tag at the N-terminus, has a calculated MW of 52.7 kDa. The predicted N-terminus is Phe 20. DTT-reduced Protein migrates as 52-55 kDa. KDa

Human CellExp MMP-1, human recombinant protein - Additional InfoGene ID
Gene Symbol
Other Names
MMP1, CLG, CLGN**4312**
MMP-1Gene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Target/Specificity
MMP-1**Human**
HEK 293 cells
SDS-PAGE; ≥95%
HPLC;
Yes**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized powder

Storage

-20°C; Lyophilized from 0.22 µm filtered solution in MES, NaCl, CaCl₂ and Brij35. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

Human CellExp MMP-1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp MMP-1, human recombinant protein - Images

Human CellExp MMP-1, human recombinant protein - Background

Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMPs are secreted as inactive pro-proteins which are activated when cleaved by extracellular proteinases. The enzyme encoded by this gene degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. Thrombospondins, intervertebral disc proteins, regulate the effective levels of matrix metalloproteinases (MMPs) 2 and 9, which are key effectors of ECM remodeling. Matrix metalloproteinase-1 (MMP-1) also known as interstitial collagenase and fibroblast collagenase. MMP1 is expressed by fibroblasts, keratinocytes, endothelial cells, monocytes and macrophages. MMP-1 breaks down the interstitial collagens, types I, II, and III. MMP1 can degrade a broad range of substrates including types I, II, III, VII, VIII, and X collagens as well as casein, gelatin, myelin basic protein, L Selectin, proTNF, IL1 β , IGFBP3, IGFBP5, pro MMP2 and pro MMP9.

Human CellExp MMP-1, human recombinant protein - References

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Whitham S.E.,et al.Biochem. J. 240:913-916(1986).
Goldberg G.I.,et al.J. Biol. Chem. 261:6600-6605(1986).
Lin D.,et al.Submitted (DEC-1996) to the EMBL/GenBank/DDBJ databases.
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