

# Human CellExp™ MMP-1, Human Recombinant

**CATALOG #:** 7244-10 10 µg  
7244-50 50 µg

**ALTERNATE NAMES:** MMP1, CLG, CLGN, interstitial collagenase and fibroblast collagenase.

**SOURCE:** HEK 293 cells (Phe 20 - Asn 469)

**PURITY:** ≥ 95% by SDS-PAGE gel

**MOL. WEIGHT:** This protein has a polyhistidine tag at the C-terminus. It has a calculated MW of 53.1 kDa. The protein migrates as 57-64 kDa under reducing conditions.

**ENDOTOXIN LEVEL:** < 1 EU/µg by LAL method

**FORM:** Lyophilized

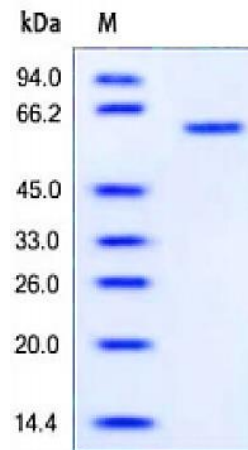
**FORMULATION:** Lyophilized from 0.2 µm filtered solution of 20 mM MES, 150 mM NaCl, pH 6.0 with 10% Trehalose as protectant.

**STORAGE CONDITIONS:** Store at -20 °C. After reconstitution, aliquot and store at -20 °C or -80 °C. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile deionized water. Do not vortex. This solution is recommended to store at -20 °C or -80 °C.

**DESCRIPTION:** 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, IL1β, IGFBP3, IGFBP5, pro MMP2 and pro MMP9.



His-tag Human recombinant MMP-1 on a SDS-PAGE under reducing conditions followed by Coomassie staining.

**RELATED PRODUCTS:**

- MMP-2, Human CellExp™, Human Recombinant (Cat. No. 7245-10)
- MMP-9, Human CellExp™, Human Recombinant (Cat. No. 7246-10)
- MMP-1, Human Recombinant (Cat. No. 7781-10, -50, -1000)
- MMP-2, Human Recombinant (Cat. No. 7782-10, -50, -1000)
- MMP-3, Human Recombinant (Cat. No. 7783-10, -50, -1000)
- MMP-9, Human Recombinant (Cat. No. 7789-10, -50, -1000)

