# **Recombinant Human MMP-1 Protein**

ABclonal www.abclonal.com

Catalog No.: RP00211 Recombinant

## **Sequence Information**

Species Gene ID Swiss Prot Human 4312 P03956

**Tags** C-His

**Synonyms** MMP1;CLG;CLGN

## **Product Information**

Source Purification
HEK293 cells > 97% by SDSPAGE.

### **Endotoxin**

< 0.1 EU/ $\mu g$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### **Contact**

<u>a</u>	400-999-6126
$\bowtie$	cn.market@abclonal.com.cn
•	www.abclonal.com.cn

# **Background**

MMP1, also known as MMP-1, contains 4 hemopexin-like domains and is a member of the matrix metalloproteinase (MMP) family. Matrix metalloproteases, also called matrixins, are zinc-dependent endopeptidases that are the major proteases involved in ECM degradation. MMPs 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. MMP1 is expressed by fibroblasts, keratinocytes, endothelial cells, monocytes and macrophages.Mutations of MMP1 are associated with chronic obstructive pulmonary disease (COPD).

### **Basic Information**

#### **Description**

Recombinant Human MMP1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Phe20-Asn469) of human MMP1 (Accession #NP\_002412.1) fused with a 6×His tag at the C-terminus.

### **Bio-Activity**

1.Measured in a cell migration assay using A549 cells. 1 ng/mL of Recombinant Human MMP-1 can effectively induce A549 cells migration. |2.Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH2. The specific activity is >997 pmol/min/ $\mu$ q.

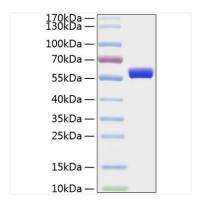
#### Storage

Store the lyophilized protein at -20°C to -80 °C for long term.

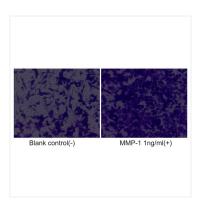
After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.

Avoid repeated freeze/thaw cycles.

# **Validation Data**



Recombinant Human MMP-1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 55-60 kDa.



Recombinant Human MMP-1 induces cell migration of the A549 cells. 1 ng/mL of Recombinant Human MMP-1 can effectively induce A549 cells migration.