

RP00103

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Recombinant Human MMP-9 Protein

Catalog No.: RP00103

Recombinant

3 Publications

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	4318	P14780

Tags

C-His

Synonyms

MMP9;CLG4B;GELB;MANDP2;MMP-9

Product Information

Source	Purification
HEK293 cells	> 97% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg 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 vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

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 MMP's are secreted as inactive proproteins 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.

Basic Information

Description

Recombinant Human MMP-9 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala20-Asp707 (Q279R)) of human MMP-9/CLG4B (Accession #NP_004985.2) 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-9 can effectively induce A549 cells migration. |2. Recombinant Human MMP-9 Protein cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH2 (Catalog # ES001). The specific activity is >468 pmol/min/μg, as measured under the described conditions.

Storage

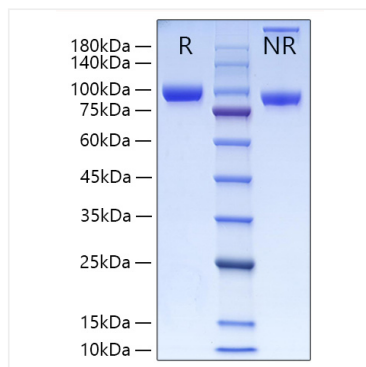
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

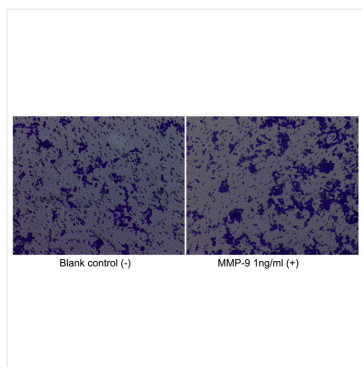


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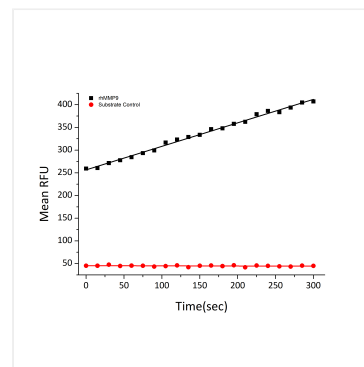
Validation Data



Recombinant Human ISG15 Protein was resolved with SDS PAGE under reducing (R) and non-reducing (NR) conditions, showing single bands at 100 kDa and 200 kDa, respectively.



Recombinant Human MMP-9 induces cell migration of the A549 cells. 1 ng/mL of Recombinant Human MMP-9 can effectively induce A549 cells migration.



Recombinant Human MMP-9 Protein cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH₂ (Catalog # ES001). The specific activity is >468 pmol/min/μg, as measured under the described conditions.