

# Biotinylated Human MMP-9 Protein (pro form), Ultra Low Endotoxin



Cat. No. MMP-HM409B-UL

## Description

<b>Source</b>	Recombinant Biotinylated Human MMP-9 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. The protein needs to be activated by APMA for an activated form. It contains Ala20-Asp707.
<b>Accession</b>	P14780
<b>Molecular Weight</b>	The protein has a predicted MW of 79.3 kDa. Due to glycosylation, the protein migrates to 95-105 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in 50mM Tris, 10mM CaCl <sub>2</sub> , 150mM NaCl, 0.05% Brij-35 (w/v) (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Matrix metalloproteinase 9 (MMP9) contributes to this process and deficiencies in the MMP9 lead to impaired healing. Inappropriate expression of MMP9 also contributes to impaired re-epithelialization. Previously we demonstrated that FOXO1 was activated in wound healing but to higher levels in diabetic wounds. To address mechanisms of impaired re-epithelialization we examined MMP9 expression in vivo in full thickness dermal scalp wounds created in experimental K14.

## Assay Data

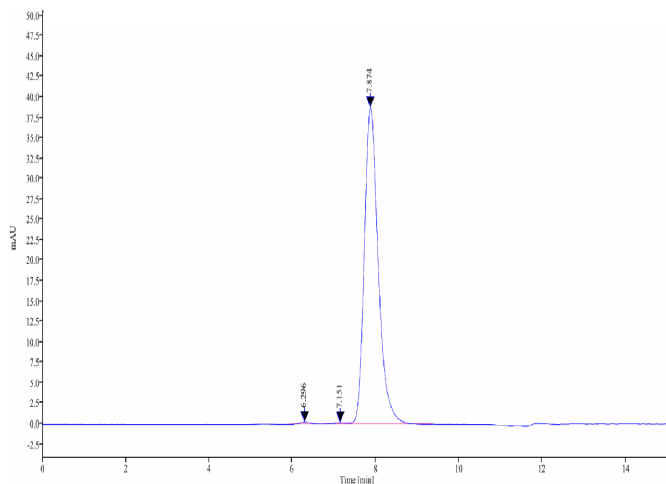
### Bis-Tris PAGE



Biotinylated Human MMP-9 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

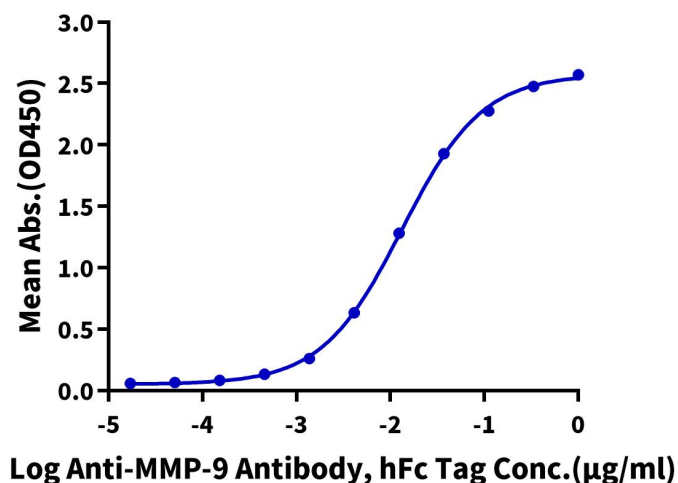


The purity of Biotinylated Human MMP-9 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Biotinylated Human MMP-9, His Avi Tag ELISA**

0.05µg Biotinylated Human MMP-9, His Avi Tag Per Well



Immobilized Biotinylated Human MMP-9, His Avi Tag at 0.5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-MMP-9 Antibody, hFc Tag with the EC50 of 13.3ng/ml determined by ELISA.

Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH2. The specific activity is > 800 pmol/min/µg.