

Human MMP-9 Protein

Cat. No. MMP-HM409



Description

Source	Recombinant 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 to have hydrolytic activity. It contains Ala20-Asp707.
Accession	P14780
Molecular Weight	The protein has a predicted MW of 79.3 kDa. Due to glycosylation, the protein migrates to 85-100 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

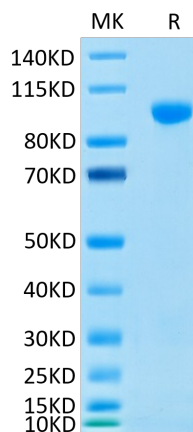
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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.

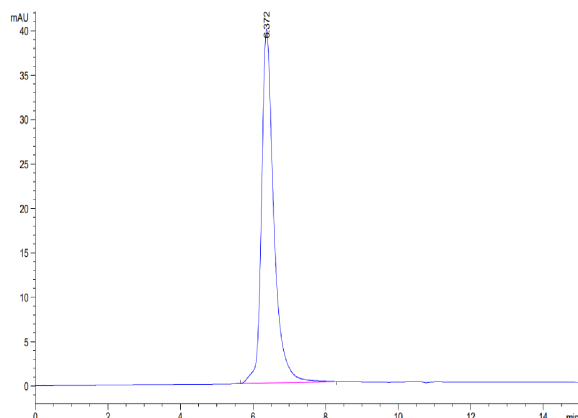
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



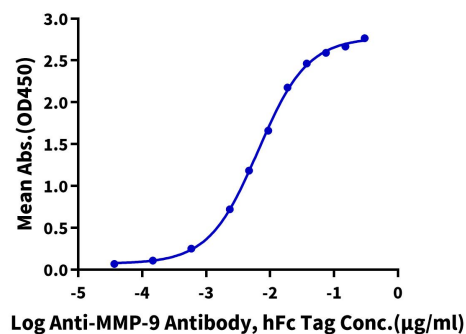
The purity of Human MMP-9 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human MMP-9, His Tag ELISA

0.1 μ g Human MMP-9, His Tag Per Well



Immobilized Human MMP-9, His Tag at 1 μ g/ml (100 μ l/Well) on the plate. Dose response curve for Anti-MMP-9 Antibody, hFc Tag with the EC50 of 6.5ng/ml determined by ELISA.