

Human MMP-9 Protein (pro form)



Cat. No. MMP-HM209

Description	
Source	Recombinant Human MMP-9 Protein (pro form) is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Ala20-Asp707.
Accession	P14780
Molecular Weight	The protein has a predicted MW of 102.31 kDa. Due to glycosylation, the protein migrates to 120-140 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU 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 0.22 µm filtered solution in 50mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
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%.

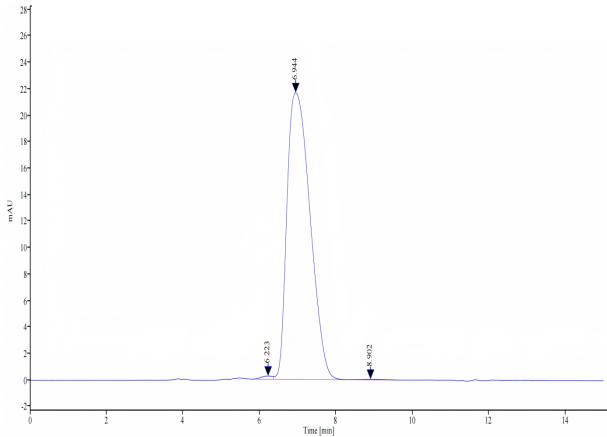
SEC-HPLC

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Assay Data



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

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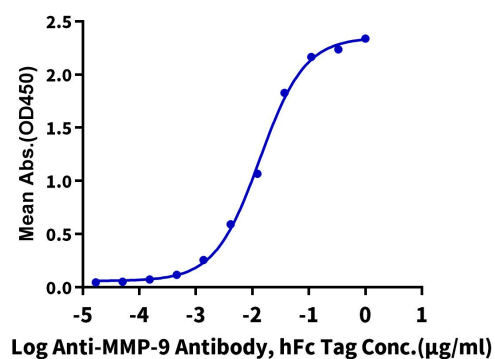
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Assay Data

ELISA Data

Human MMP-9, hFc Tag ELISA

0.1µg Human MMP-9, hFc Tag Per Well



Immobilized Human MMP-9, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-MMP-9 Antibody, hFc Tag with the EC50 of 13.6ng/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 > 1000 pmol/min/µg.