

Bioactive

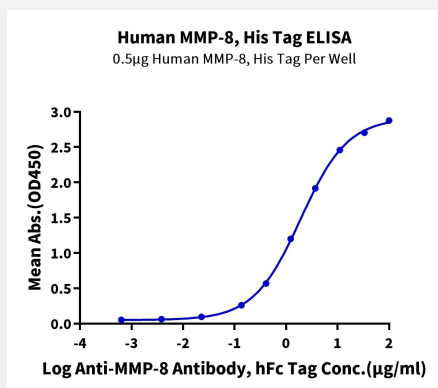
HuPro®

# MMP8 (Human) Recombinant Protein

Catalog # P9844

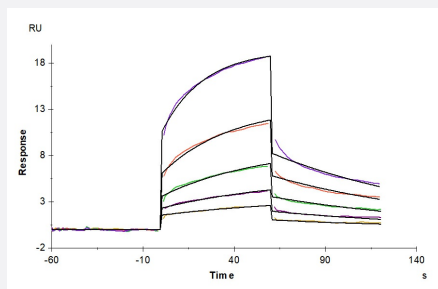
Size 100 ug

## Applications



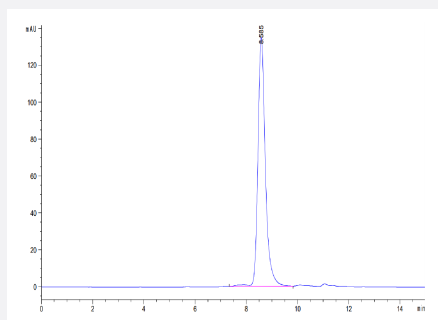
### Enzyme-linked Immunoabsorbent Assay

Immobilized Human MMP-8, His Tag at 5 ug/mL (100 uL/well) on the plate. Dose response curve for Anti-MMP-8 Antibody, hFc Tag with the EC50 of 1.93 ug/mL determined by ELISA (QC Test).



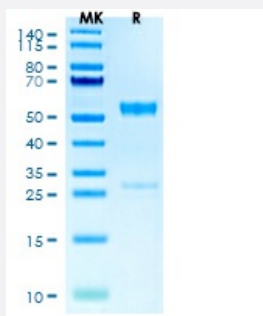
### Surface Plasmon Resonance

Anti-MMP-8 Antibody captured on CM5 Chip via Protein A can bind Human MMP-8, His Tag with an affinity constant of 1.14 uM as determined in SPR assay (Biacore T200).



### SEC-HPLC

The purity of Human MMP-8 is greater than 95% as determined by SEC-HPLC.



## Tris-Bis PAGE

Human MMP-8 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

## Specification

<b>Product Description</b>	Human MMP8 (P22894, Phe21-Gly467) partial recombinant protein with His tag at C-Terminus expressed in HEK293 cells.
<b>Sequence</b>	Phe21-Gly467
<b>Host</b>	Human
<b>Theoretical MW (kDa)</b>	52.2
<b>Form</b>	Lyophilized
<b>Preparation Method</b>	Mammalian cell (HEK293) expression system
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
<b>Endotoxin Level</b>	< 1 EU per 1 ug of protein (determined by LAL method)
<b>Activity</b>	The EC <sub>50</sub> was 1.93 ug/mL, measured by ELISA at 5 ug/mL. The affinity constant of 1.14 uM as determined in SPR assay (Biacore T200). Measured by the ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH <sub>2</sub> . The specific activity is > 300 pmoles/min/ug (QC Test).
<b>Quality Control Testing</b>	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human MMP-8 is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human MMP-8 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
<b>Recommend Usage</b>	Biological Activity ELISA SDS-PAGE SPR The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	Lyophilized from sterile distilled Water is > 100 ug/mL
<b>Storage Instruction</b>	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

## Note

Result of bioactivity analysis

## Applications

- Enzyme-linked Immunoabsorbent Assay

Immobilized Human MMP-8, His Tag at 5 ug/mL (100 uL/well) on the plate. Dose response curve for Anti-MMP-8 Antibody, hFc Tag with the EC50 of 1.93 ug/mL determined by ELISA (QC Test).

- Functional Study

- SDS-PAGE

- Surface Plasmon Resonance

Anti-MMP-8 Antibody captured on CM5 Chip via Protein A can bind Human MMP-8, His Tag with an affinity constant of 1.14 uM as determined in SPR assay (Biacore T200).

## Gene Info — MMP8

Entrez GeneID [4317](#)

Protein Accession# [P22894](#)

Gene Name MMP8

Gene Alias CLG1, HNC, PMNL-CL

Gene Description matrix metalloproteinase 8 (neutrophil collagenase)

Omim ID [120355](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

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. However, the enzyme encoded by this gene is stored in secondary granules within neutrophils and is activated by autolytic cleavage. Its function is degradation of type I, II and III collagens. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. [provided by RefSeq]

**Other Designations**

PMNL collagenase|matrix metalloproteinase 8|matrix metalloproteinase 8 (neutrophil collagenase)|neutrophil collagenase

## Disease

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- [Breast Neoplasms](#)
- [Bronchiectasis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chorioamnionitis](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)
- [Hepatitis C](#)
- [Infection](#)
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