

**Human CellExp MMP-9, human recombinant protein**  
**MMP9, CLG4B, GELB, MANDP2, MMP-9, Matrix Metalloproteinase-9**  
**Catalog # PBV10876r**

## Specification

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### Human CellExp MMP-9, human recombinant protein - Product info

Primary Accession  
Calculated MW

[P14780](#)

This protein has 450 amino acids with a polyhistidine tag at C-terminus, and a calculated MW of 50.8 kDa. The predicted N-terminal is Ala20. DTT-reduced protein migrates as 55-65 kDa protein due to different glycosylation. KDa

### Human CellExp MMP-9, human recombinant protein - Additional Info

Gene ID	<b>4318</b>
Gene Symbol	<b>MMP-9</b>
<b>Other Names</b>	
MMP9, CLG4B, GELB, MANDP2, MMP-9, Matrix Metalloproteinase-9	
Gene Source	<b>Human</b>
Source	<b>HEK 293 cells</b>
Assay&Purity	<b>SDS-PAGE; ≥95%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
<b>Target/Specificity</b>	
MMP-9	

### Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

### Format

Lyophilized powder

### Storage

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

### Human CellExp MMP-9, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Human CellExp MMP-9, human recombinant protein - Images**

#### **Human CellExp MMP-9, human recombinant protein - 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 MMPs are secreted as inactive pro-proteins 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. Thrombospondins, intervertebral disc proteins, regulate the effective levels of matrix metalloproteinases (MMPs) 2 and 9, which are key effectors of ECM remodeling. Matrix metalloproteinase 9 (MMP-9), also known as 92 kDa type IV collagenase, 92 kDa gelatinase or gelatinase B (GELB), CLG4B, is secreted from neutrophils, macrophages, and a number of transformed cells, and is the most complex family member in terms of domain structure and regulation of its activity. Structurally, MMP9 may be divided into five distinct domains: a pro-domain which is cleaved upon activation, a gelatin binding domain consisting of three contiguous fibronectin type II units, a catalytic domain containing the zinc binding site, a proline rich linker region, and a carboxyl terminal hemopexin like domain. This enzyme degrades various substrates including gelatin, collagen types IV and V, and elastin. MMP9 is involved in a variety of autoimmune diseases such as systemic lupus erythematosus, rheumatoid arthritis, and multiple sclerosis, and be regarded as a potential therapeutic target.

#### **Human CellExp MMP-9, human recombinant protein - References**

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