



Recombinant Protein Technical Manual  
Recombinant Human MMP8/CLG1 Protein (His Tag)  
RPES0758

### Product Data:

**Product SKU:** RPES0758

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P22894

### Protein Information:

**Molecular Mass:** 52.8 kDa

**AP Molecular Mass:** 58 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Neutrophil collagenase; Matrix metalloproteinase-8; MMP-8; PMNL collagenase; PMNL-CL; MMP8; CLG1

## Immunogen Information:

**Sequence:** Phe21-Gly467

## Background:

Matrix metalloproteinases (MMPs) are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. MMP8 (neutrophil collagenase) is expressed in neutrophils, where it is stored in specific granules. MMP8 release from the neutrophils is stimulated by various factors such as interleukins 1 and 8, TNF- $\alpha$  and GM-CSF. MMP8 is capable of cleaving types I, II and III triple-helical collagen, gelatin peptides, fibronectin, proteoglycans, aggrecan, serpins,  $\beta$ -casein and peptides such as angiotensin and substance P. In addition to its function in phagocytosis, MMP8 has a high capacity for infiltrating connective tissue, and is implicated in the breakdown of the extracellular matrix in diseases such as rheumatoid arthritis. Structurally, MMP8 consists of several domains: a pro-domain that is cleaved upon activation, a catalytic domain containing the zinc-binding site, a short hinge region and a hemopexin-like domain. MMP8 is heavily glycosylated.