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# **Product Datasheet**

Product Name Matrix Metalloproteinase-8 Human Recombinant

Cata No CB500478

Source Escherichia Coli.

Synonyms Neutrophil collagenase, EC 3.4.24.34, Matrix metalloproteinase-8, MMP-8, PMNL

collagenase, PMNL-CL, HNC, CLG1.

### **Description**

Full-length recombinant human neutrophil pro-collagenase (MMP-8), latent form.

Matrix metalloproteinase 8 (MMP-8), or neutrophil collagenase, degrades interstitial collagens, acting preferentially on collagen type I.

Increased full-length MMP-8 protein was associated with infiltration into the skin of neutrophils, which are the major cell type that expresses MMP-8.

MMP-8 is synthesized and stored in specific granules in neutrophil leukocytes. MMP-8 activity is therefore regulated by factors such as surface-bound ligands (IgG or complement components) that release it through degranulation. Once released and activated through proteolytic or oxidative mechanisms, MMP-8 plays a major role in the connective tissue turnover that accompanies inflammatory processes.

Matrix Metalloproteinase-8 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain having a molecular mass of 75 kDa.

The MMP-8 is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile Filtered clear solution.

## **Biological Activity**

100 units/ml after activation with APMA by solution assay method.

One unit of collagenolytic activity is defined as the cleavage of 1µg of collagen per minute by the solution method.

#### **Purity**

Greater than 90% as determined by SDS-PAGE.

### **Formulation**

The protein Solution (100 units/ml) in 0.05M Tris-HCl buffer, pH 7.6, containing 0.2M NaCl, 5mM CaCl<sub>2</sub>, 0.0025% NaN<sub>3</sub> and 0.1% BSA.

### **Stability**

MMP-8 although stable at  $4^{\circ}$ C for 1 week, should be stored desiccated below -18°C.

Please prevent freeze-thaw cycles.

### **Applications**

Used as a standard for analyzing mammalian collagenase activity