

California Bioscience

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 CaCl₂, 0.0025% NaN₃ and 0.1% BSA.

Stability

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

Please prevent freeze-thaw cycles.

Applications

Used as a standard for analyzing mammalian collagenase activity