

Matrix Metalloproteinase-8 from Human, Recombinant

Cat. No. NATE-0862

Lot. No. (See product label)

Introduction

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.

Applications

Used as a standard for analyzing mammalian collagenase activity.

Synonyms

Neutrophil collagenase; EC 3.4.24.34; Matrix metalloproteinase-8; MMP-8; PMNL collagenase; PMNL-CL; HNC; CLG1

Product Information

Species

Human

Source

E. coli

Appearance

Sterile Filtered clear solution.

EC Number

EC 3.4.24.34

CAS No.

2593923

Molecular Weight

75 kDa

Purity

Greater than 90% as determined by SDS-PAGE.

Activity

100 units/ml

Buffer

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.

Unit Definition

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

Storage and Shipping Information

Stability

MMP-8 although stable at 4°C for 1 week, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles.