

32-9336: Recombinant Human Neutrophil Matrix metalloproteinase-8/MMP8 (C-10His)

Alternative Name : Neutrophil collagenase; Matrix metalloproteinase-8; MMP-8; PMNL collagenase; PMNL-CL; MMP8; CLG1

Description

Source : Human Cells;

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- α 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.

Product Info

Amount : 500 μ g / 50 μ g

Content : Lyophilized from a 0.2 μ m filtered solution of 50mM Tris-HCl, 10mM CaCl₂, 150mM NaCl, pH7.5.

Amino Acid : Recombinant Human Neutrophil Collagenase is produced by our Mammalian expression system and the target gene encoding Phe21-Gly467 is expressed with a 10His tag at the C-terminus.