

Recombinant Bovine Collagenase 3 (MMP13), N-His

Cat. No.: AP9C360

Product Type: Animal Proteins

Size: 10 µg; 50 µg; 200 µg; 1 mg; 5 mg

Product Overview

BioVenic's Recombinant Bovine Collagenase 3 (MMP13), N-His is a recombinant protein expressed from *E.coli*. Its predicted molecular weight is 28.2 kDa. The purity is >90% (SDS-PAGE).

Specifications

Type	Recombinant Protein
Species	Bovine
Expression System	<i>E.coli</i>
Purity	>90% (SDS-PAGE)
Endotoxin	< 1 EU/µg
Predicted Molecular Weight	28.2 kDa
Molecular Weight	32 kDa
Physical State	Lyophilized
Formulation	The buffer before lyophilization is 20 mM Tris, 150 mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Target Information

Bovine matrix metalloproteinase 13 (MMP13), also known as collagenase-3, is a member of the matrix metalloproteinase family of enzymes. This protein is essential in cattle for the degradation of extracellular matrix components, particularly collagen types I, II, and III, which are crucial for bone and cartilage health. MMP13 plays a significant role in physiological processes such as tissue remodeling, wound healing, and the development of the skeletal system. It is highly expressed during embryogenesis and in adult bone during endochondral ossification. In the context of disease, MMP13 is implicated in the pathogenesis of conditions like osteoarthritis and is a key regulator in the activation of osteoclasts, which are important for bone resorption. The balanced expression and activity of MMP13 are vital for maintaining tissue homeostasis, and its dysregulation can lead to various pathological conditions in cattle.

Protein	Bovine Collagenase 3 (MMP13)
Protein Synonym	CLG3; Collagenase 3

Gene ID [281914](#)

UniProt ID [O77656](#)

Shipping and Storage

This product is shipped with dry ice. It is recommended to aliquot as needed and store at -80°C upon receipt. Reconstituted protein solution can be stored at 4°C for 1 week, at < -80°C for 12 months. Avoid repeated freezing and thawing.

User Note

Always centrifuge tubes before opening. Avoid mixing by vortexing or pipetting. Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Aliquot the reconstituted solution to minimise freeze-thaw cycles.

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.