Human MMP-8 / CLG1 Protein

Catalog Number: **10254-HNAH**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CLG1; HNC; MMP-8; PMNL-CL

Protein Construction:

A DNA sequence encoding the pro form of human MMP8 (NP_002415.1) (Phe 21-Gly 467) was expressed and purified, with an initial Met at the N-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH2 (AnaSpec, Catalog # 27076) . The specific activity is > 250 pmoles/min/μg .(Activation description: The proenzyme needs to be activated by APMA for an activated form)

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human MMP8 consisting of 448 amino acids and has a calculated molecular mass of 52 kDa. It migrates as an approximately 65 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

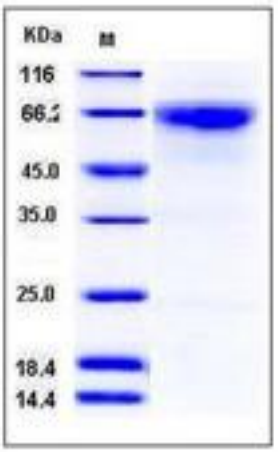
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Matrix metalloproteinases (MMPs) are a family of zinc-dependent endopeptidases that degrade components of the extracellular matrix (ECM) and play essential roles in various physiological processes such as morphogenesis, differentiation, angiogenesis and tissue remodeling, as well as pathological processes including inflammation, arthritis, cardiovascular diseases, pulmonary diseases and tumor invasion. Neutrophil collagenase, also known as Matrix metalloproteinase-8, MMP-8, and CLG1, is a member of the peptidase M10A family. MMP-8 may affect the metastatic behaviour of breast cancer cells through protection against lymph node metastasis, underlining the importance of anti-target identification in drug development. MMP-8 in the tumour may have a protective effect against lymph node metastasis. MMP-8 may affect the metastatic behaviour of breast cancer cells through protection against lymph node metastasis, underlining the importance of anti-target identification in drug development. MMP-8 participates in wound repair by contributing to the resolution of inflammation and open the possibility to develop new strategies for treating wound healing defects.

References

1.Hasty K.A., *et al.*,(1990), Human neutrophil collagenase. A distinct gene product with homology to other matrix metalloproteinases. J. Biol. Chem. 265:11421-11424. 2.Blaeser J., *et al.*, (1991), Mercurial activation of human polymorphonuclear leucocyte procollagenase.Eur. J. Biochem. 202:1223-1230. 3.Blaeser J., *et al.*,(1991), Mercurial activation of human polymorphonuclear leucocyte procollagenase. Eur. J. Biochem. 202:1223-1230.