Product Data Sheet

Product Name:	MMP9 Human, HEK
Cat. No.:	GP21942
Batch No.:	1

Product Data

Purity	>98%	Source	
Phycical Appearance	solid	Shipping Condit	

Synonyms Matrix metalloproteinase-9; MMP-9; 92 kDa gelatinase; Gelatinase B; GELB; MMP9; CLG4B.

Amino Acid Sequence APRQRQSTLVLFPGDLRTNLTDRQLAEEYLYRYGYTRVAEMRGESKSLGPALLLLQKQLSLPETGELDSATLKAMRTPRCGVPDLGRFQTFEGDLKWHH

Solubility It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized p

Formulation MMP9 filtered (0.4 μm) and lyophilized from 0.5mg/ml solution in PBS, pH7.5 and 5% (w/v) Threalose.

Introduction

Matrix metalloproteinases are a family of zinc and calcium-dependent endopeptidases that break down extracellular matrix proteins. The MMP9 is secreted as a 92kDa zymogen. Cleavage of ProMMP-9 results in the active enzyme, having a molecular weight of approximately 82kDa. MMP9 is composed of the following domains: a gelatin-binding domain consisting of three fibronectin type II units, a catalytic domain containing the zinc-binding site, a proline-rich type V collagen-homologous domain and a hemopexin-like domain. MMP9 is produced by the several cell types: monocytes, macrophages, neutrophils, keratinocytes, fibroblasts, osteoclasts and endothelial cells. MMP9 is involved in inflammatory responses, tissue remodeling, wound healing, tumor growth and metastasis. MMP9 may also play an important part in local proteolysis of the extracellular matrix and in leukocyte migration, as well as in bone osteoclastic resorption. MMP9 cleaves type IV and type V collagens into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. MMP9 can also degrade fibronectin but not laminin or Pz-peptide.MMP9 defects may be a cause of susceptibility to intervertebral disc disease (IDD), also known as lumbar disk herniation (LDH).

Stability

Store lyophilized protein at -20°C . Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C .

Background

MMP9 Human Recombinant is a single, glycosylated polypeptide chain containing 694 amino acids (20-707a.a) and having a molecular mass of 77.2kDa (calculated). MMP9 is fused to a 6 a.a His tag at C-terminal.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA