PRODUCT INFORMATION

Expression system E.coli

Domain 100-469aa

UniProt No. P03956

NCBI Accession No. NP_002412

Alternative Names

interstitial collagenase isoform 1 preproprotein, interstitial collagenase isoform 1 preproprotein, CLG, CLGN

PRODUCT SPECIFICATION

Molecular Weight 45.0 kDa (393aa)

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE, Denatured

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

MMP1 protein of the matrix metalloproteinase (MMP) family is involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22. 3. Recombinant human MMP1 protein, fused to His-tag at N-terminus, was expressed in E.



coli.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSFVLTEGN PRWEQTHLTY RIENYTPDLP RADVDHAIEK AFQLWSNVTP LTFTKVSEGQ ADIMISFVRG DHRDNSPFDG PGGNLAHAFQ PGPGIGGDAH FDEDERWTNN FREYNLHRVA AHELGHSLGL SHSTDIGALM YPSYTFSGDV QLAQDDIDGI QAIYGRSQNP VQPIGPQTPK ACDSKLTFDA ITTIRGEVMF FKDRFYMRTN PFYPEVELNF ISVFWPQLPN GLEAAYEFAD RDEVRFFKGN KYWAVQGQNV LHGYPKDIYS SFGFPRTVKH IDAALSEENT GKTYFFVANK YWRYDEYKRS MDPGYPKMIA HDFPGIGHKV DAVFMKDGFF YFFHGTRQYK FDPKTKRILT LQKANSWFNC RKN

General References

Desrochers P.E., et al (1991). J. Clin. Invest. 87:2258-2265 Templeton N.S., et al (1990). Cancer Res. 50:5431-5437

DATA



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.