

AR51360PU-N

Human MMP-13 (His-tag) - Purified

Alternate names:

Collagenase 3, MMP13, Matrix metalloproteinase-13

Quantity:

0.1 mg

Concentration:

0.5 mg/ml (determined by Absorbance at 280nm)

Background:

MMP13 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. The protein encoded by this gene cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis.

Uniprot ID:

[P45452](#)

NCBI:

[NP_002418](#)

GeneID:

[4322](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.15M NaCl, 1mM DTT

Description:

Recombinant human MMP13 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MGSYNVFPRT LKWSKMNLTY RIVNYTPDMT HSEVEKAFKK
AFKVWSDVTP LNFTRLHDGI ADIMISFGIK EHGDFYPPDG PSGLLAHAFPG PGPNYGGDAH
FDDDETWTSS SKGYNLFLVA AHEFGHSLGL DSKDPGALM FPIYTYTGKS HFMLPDDDVQ
GIQSLYGP GD EDPNPKHPKT PDKDPSLSL DAITSRGET MIFKDRFFWR LHPQQVDAEL
FLTKSFWEPEL PNRIDAAYEH PSHDLIFIFR GRKFWALNGY DILEGYPKKI SELGLPKEVK
KISA AVHFED TGKTL LFSGN QVWRYDDTNH IMDKDYPRLI EEDFPGIGDK VDAVYEKNGY
IYFFNGPIQF EYSIWSNRIV RVMPANSILW C

Molecular weight: 44.7 kDa (391aa) confirmed by MALDI-TOF

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

Gomis-Rueth F.-X., et al (1996). J. Mol. Biol. 264:556-566

Lausch E., et al (2009). Am. J. Hum. Genet. 85:168-178

Pictures:

