

MMP13, 104- 471aa, Human, His tag, E.coli

Cat.NO.: TP02992

3th Edition

Synonyms:collagenase 3 preproprotein , CLG3, MANDP1

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

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.15M NaCl, 1mM DTT

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

Sequences:

MGSSHHHHHSSGLVPRGSHMGSYNVFPRTLKWSKMNLTYRIVNYTPDMTHSEVEKAFKKAFKVVSDVTPLNFT
RLHDGIADIMISFGIKEHGDFYPFDGPGSLLAHAFPPGPNYGGDAHFDDEETWTSSSKGYNLFLVAAHEFGHSLGL
DHSKDPGALMFPIYTYTGKSHFMLPDDDVQGIQSLYGPGDEDPNPKHPKTPDKCDPSLSLDAITSLRGETMIFKDRF
FWRLHPQQVDAELFLTKSFWPELPNRIDAAYEHPSHDLIFRGRKFWALNGYDILEGYPKKISELGLPKEVKKISAA
VHFEDTGKTLFSGNQVWRYDDTNHIMDKDYPRLIEEDFPGIGDKVDAVYEKNGYIYFFNGPIQFEYSIWSNRIVRV
MPANSILWC

Purity:> 95% by HPLC

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

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.