Recombinant Human MMP3, His-tagged

Cat. No. MMP3-5080H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MMP3 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
Description	Proteins of the matrix metalloproteinase (MMP) family are 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. MMP3 is an enzyme which degrades fibronectin, laminin, collagens III, IV, IX, and X, and cartilage proteoglycans. The enzyme is thought to be involved in wound repair, progression of atherosclerosis, and tumor initiation.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol
Molecular Mass	45.2 kDa (401aa) confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSFRTFPGI PKWRKTHLTY RIVNYTPDLP KDAVDSAVEK ALKVWEEVTP LTFSRLYEGE ADIMISFAVR EHGDFYPFDG PGNVLAHAYA PGPGINGDAH FDDDEQWTKD TTGTNLFLVA AHEIGHSLGL FHSANTEALM YPLYHSLTDL TRFRLSQDDI NGIQSLYGPP PDSPETPLVP TEPVPPEPGT PANCDPALSF DAVSTLRGEI LIFKDRHFWR KSLRKLEPEL

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	HLISSFWPSL PSGVDAAYEV TSKDLVFIFK GNQFWAIRGN EVRAGYPRGI HTLGFPPTVR KIDAAISDKE KNKTYFFVED KYWRFDEKRN SMEPGFPKQI AEDFPGIDSK IDAVFEEFGF FYFFTGSSQL EFDPNAKKVT HTLKSNSWLN C
Purity	>90% by SDS - PAGE
Applications	SDS-PAGE
Storage	Can be stored at +4centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20centigrade or -70centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.25 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name	MMP3 matrix metallopeptidase 3 (stromelysin 1, progelatinase) [Homo sapiens]
Official Symbol	MMP3
Synonyms	MMP3; matrix metallopeptidase 3 (stromelysin 1, progelatinase); matrix metalloproteinase 3 (stromelysin 1, progelatinase) , STMY, STMY1; stromelysin-1; transin-1; proteoglycanase; matrix metalloproteinase-3; matrix metalloproteinase 3 (stromelysin 1, progelatinase); SL-1; STMY; STR1; CHDS6; MMP-3; STMY1; MGC126102; MGC126103; MGC126104;
Gene ID	4314
mRNA Refseq	NM_002422
Protein Refseq	NP_002413

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MIM	185250
UniProt ID	P08254
Chromosome Location	11q22.3
Pathway	Activation of Matrix Metalloproteinases, organism-specific biosystem; Degradation of the extracellular matrix, organism-specific biosystem; Extracellular matrix organization, organism-specific biosystem; Matrix Metalloproteinases, organism-specific biosystem; Rheumatoid arthritis, organism-specific biosystem; Rheumatoid arthritis, conserved biosystem; Transcriptional misregulation in cancer, organism-specific biosystem;
Function	calcium ion binding; metalloendopeptidase activity; peptidase activity; protein complex binding; zinc ion binding;

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