

## 32-20516: Recombinant Human MMP-1(Discontinued)

**Reactivity :** Human, Mouse

**Alternative Name :** Matrix Metalloproteinase-1, Fibroblast Collagenase, Interstitial Collagenase

### Description

**Source:** **E.coli** Matrix metalloproteinases (MMPs) are a family of endoproteases that require zinc and calcium for expressing catalytic activity. These enzymes play a central role in the maintenance and remodeling of the extracellular matrix. Elevated expression of their activity, caused either by up-regulation of their expression or down-regulation of their cognate inhibitors, has been implicated in various degenerative disorders, including arthritis, cardiovascular disease, skeletal growth-plate disorders, and cancer metastasis. MMP-1 is a secreted collagenase with specificity toward Type I, II, III, VII, and X collagens. Recombinant Human MMP-1 is a 42.7 kDa protein containing the entire catalytic N-terminal domain and the C-terminal domain, which is involved in substrate specificity, and in binding TIMP-1.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Purity: >= 90% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** MFVLTEGNPR WEQTHLYRI ENYTPDLRA DVDHAIKAF QLWSNVTPLT FTKVSEGQAD IMISFVRGDH  
RDNSPFDGPG GNLAHAFQPG PGIGGDAHFD EDERWTNNFR EYNLHRVA AH ELGHSLGLSH  
STDIGALMYP SYTFSGDVQL AQDDIDGIQA IYGRSQNPVQ PIGPQTPKAC DSKLTFDAIT TIRGEVMFFK  
DRFYMRNPF YPEVELNFIS VFWPQLPNGL EAAYEFADR EVRFFKGNKY WAVQGQNV LH GYPKDIYSSF  
GFPRTVKHID AALSEENTGK TYFFVANKYW RYDEYKRSMD PGYPKMI AHD FPGIGHKVDA VFMKDGFFYF  
FHGTRQYKFD PKTKRILT LQ KANSWFNCRK N

### Application Note

MMP-1 activity was measured by its ability to cleave a chromogenic peptide MMP-1 substrate at room temperature. At an MMP-1 concentration of 2.5 µg/ml, 50% cleavage was achieved at an incubation time of approximately 25 minutes.