

**TECHNICAL DATA SHEET**

# Recombinant Human MMP-2 (Carrier-free)

Catalog Number: 21-7072

**RPx-Pro™ Recombinant Protein**  
PRODUCT INFORMATION

**CONTENTS**

Recombinant Human MMP-2 (Carrier-free)

**DESCRIPTION**

Matrix Metalloproteinase-2 (MMP-2) belongs to the matrix metalloproteinase family of endoproteases that function in the breakdown of extracellular matrix (ECM) in various normal and disease processes. MMP-2 targets type IV collagen, as well as type V, VII and X collagens, aggrecan, link protein, elastin and fibronectin. MMP-2 has been shown to be associated with many connective tissue cells as well as neutrophils, macrophages and monocytes. MMP expression and activity are tightly regulated, both through the need to activate the inactive zymogen, and control through tissue inhibitors of matrix metalloproteinases (TIMPs).

**MOLECULAR MASS**

Recombinant human MMP-2 is a 62.0 kDa protein containing the entire catalytic N-terminal domain and the C-terminal domain (552 amino acids).

**AMINO ACID SEQUENCE**

MYNFFPRKPK WDKNQITYRI IGYTPDLPE TVDDAFARAF QVWSDVTPLR FSRIHDGEAD IMINFRWEH GDGYPFDGKD  
 GLLAHAFAPGT GVGGD SHFDDD ELWTLGEGQV VRVKYGNADGE YCKFPFLFNGK EYNSCTDTGRS DGFLWCSTTYNF  
 EKDGKYGFCPHE ALFTMGNAEG QPCKFPFRFQ GTSYDSC TTE GRTDGYRWCG TTEDYDRDKKY GFCPETAMST VGGNSEGAPC  
 VFPFTFLGNK YESCTSAGRS DGKMWCATTA NYDDDRKWGFC PDQGYSFLV AAHEFGHAMG LEHSQDPGAL MAPIYTYTKN  
 FRLSQDDIKG IQELYGASPD IDLGTGPTPT LGPVTPEICK QDIVFDGIAQ IRGEIFFFKD RFIWRTVTPR DKPMGPLLVA TFWPELPEKI  
 DAVYEAPQEE KAVFFAGNEY WIYSASTLER GYPKPLTSLG LPPDVQRVDA AFNWSKNKKT YIFAGDKFWR YNEVKKKMDP  
 GFPKLIADAW NAIPDNLDAV VDLQGGGHSY FFKGAYYLKL ENQSLKSVKF GSIKSDWLGC

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

90 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

Mouse

**BIOACTIVITY**

MMP-2 activity was measured by its ability to cleave a chromogenic peptide MMP-2 substrate at room temperature. At an MMP-2 concentration of 2.5 μg/ml, 50% cleavage was achieved at an incubation time of approximately 25 minutes.

**RESEARCH AREAS**

Angiogenesis/Cardiovascular; Bone, Skeletal, Cartilage; Cancer; Wound Healing

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

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