

TECHNICAL DATA SHEET

Recombinant Human MMP-1 (Carrier-Free)

Catalog Number: 21-9196

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

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Recombinant Human MMP-1 (Carrier-Free)

DESCRIPTION

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.

MOLECULAR MASS

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.

AMINO ACID SEQUENCE

MFVLTEGNPR WEQTHLTYRI ENYTPDLPRA DVDHAIEKAF QLWSNVTPLT FTKVSEGQAD IMISFVRGDH RDNSPFDGPG GNLAHAFQPG
 PGIGGDAHFD EDERWTNNFR EYNLHRVA AH ELGHSLGLSH STDIGALMYP SYTFSGDVQL AQDDIDGIQA IYGRSQNPVQ PIGPQTPKAC DSKLTFDAIT
 TIRGEVMFFK DRFYMRNPF YEVELNFIS VFWPQLPNGL EAAYEFADRD EVRFFKGNKY WAVQGQNVLH GYPKDIYSSF GFPRTVKHID AALSEENTGK
 TYFFVANKYW RYDEYKRSMD PGYPKMIAHD FPGIGHKVA VFMKDGFFYF FHGTRQYKFD PKTKRILTQ KANSWFCRKN

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

90 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

Mouse

BIOACTIVITY

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.

RESEARCH AREAS

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

RECONSTITUTION

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

REFERENCES

Przybyla, L.M. Matrix remodeling maintains embryonic stem cell self-renewal by activating Stat3. 2013. Stem Cells; 31(6):1097-106.

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