Recombinant rat MMP-9 protein

Catalog Number: ATGP4106

PRODUCT INFORMATION

Expression system
HEK293

Domain
20-708aa

UniProt No.
P50282

NCBI Accession No.
NP_112317.1

Alternative Names
Matrix metalloproteinase-9, 92 kDa gelatinase, 92 kDa type IV collagenase, Gelatinase B, GELB, Mmp9, MANDP2, AW743869, B/MMP, B/MMP9, Clg4, Clg4b, Gel B, MMP-9, pro-MMP-9

PRODUCT SPECIFICATION

Molecular Weight
77.2kDa (695aa)

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

Formulation
Liquid in. 20mM Tris-HCl (pH 7.5) containing 1mM CaCl2, 100mM NaCl, 10% glycerol

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Specific activity is > 2,000 pmol/min/ug, and is defined as the amount of enzyme that cleaves 1pmol of Mca-PLGL-Dpa-AR-NH2 per minute at pH 7.5 at 25C.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

Recombinant rat MMP-9 protein

Catalog Number: ATGP4106

BACKGROUND

Description

MMP-9, also known matrix metalloproteinase-9, is one of the matrix metalloproteinases superfamily which is zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. It degrades many substrates such as gelatin, collagens, elastin and proteoglycan core protein which appears to be involved in invasive ability. This protein also plays an essential role in leukocyte migration and in bone osteoclastic resorption. It plays an important role in angiogenesis and neovascularization and so appears to be involved in the remodeling associated with malignant glioma neovascularization. Recombinant rat MMP-9 protein, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

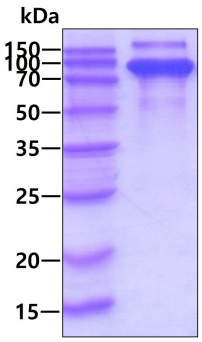
APHQRQPTYV VFPRDLKTSN LTDTQLAEDY LYRYGYTRAA QMMGEKQSLR PALLMLQKQL SLPQTGELDS ETLKAIRSPR CGVPDVGKFQ TFEGDLKWHH HNITYWIQSY TEDLPRDVID DSFARAFAVW SAVTPLTFTR VYGLEADIVI QFGVAEHGDG YPFDGKDGLL AHAFPPGPGI QGDAHFDDDE LWSLGKGAVV PTYFGNANGA PCHFPFTFEG RSYLSCTTDG RNDGKPWCGT TADYDTDRKY GFCPSENLYT EHGNGDGKPC VFPFIFEGHS YSACTTKGRS DGYRWCATTA NYDQDKLYGF CPTRADVTVT GGNSAGEMCV FPFVFLGKQY STCTGEGRSD GRLWCATTSN FDADKKWGFC PDQGYSLFLV AAHEFGHALG LDHSSVPEAL MYPMYHYHED SPLHEDDIKG IQHLYGRGSK PDPRPPATTA AEPQPTAPPT MCPTAPPMAY PTGGPTVAPT GAPSPGPTGP PTAGPSEAPT ESSTPVDNPC NVDVFDAIAD IQGALHFFKD GRYWKFSNHG GSQLQGPFLI ARTWPALPAK LNSAFEDPQS KKIFFFSGRK MWVYTGQTVL GPRSLDKLGL GSEVTLVTGL LPRRGGKALL ISRERIWKFD LKSQKVDPQS VTRLDNEFSG VPWNSHNVFH YQDKAYFCHD KYFWRVSFHN RVNQVDHVAY VTYDLLQCP<H HHHHH>

General References

Lee YD., et al, (2014) BMB Rep. 47:262-267.
Matin S., et al, (2018) Int J Chron Obstruct Pulmon Dis. 13:1449-1454.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain