Recombinant mouse MMP-9 protein

Catalog Number: ATGP4127

PRODUCT INFORMATION

Expression system
HEK293

Domain
20-730aa

UniProt No.
P41245

NCBI Accession No.
NP_038627.1

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
79.3kDa (717aa)

Concentration
1mg/ml (determined by Bradford assay)

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 >1,500 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.

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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 mouse 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

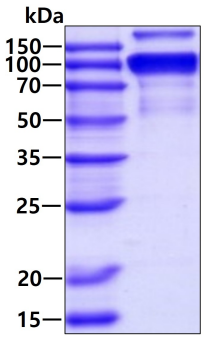
APYQRQPTFV VFPKDLKTSN LTDTQLAEAY LYRYGYTRAA QMMGEKQSLR PALLMLQKQL SLPQTGELDS QTLKAIRTPR CGVPDVGRFQ TFKGLKWDHH NITYWIQNYS EDLPRDMIDD AFARAFAVWG EVAPLTFTRV YGPEADIVIQ FGVAEHGDGY PFDGKDGLLA HAFPPGAGVQ GDAHFDDDEL WSLGKGVVIP TYYGNSNGAP CHFPFTFEGR SYSACTTDGR NDGTPWCSTT ADYDKDGKFG FCPSERLYTE HGNGEGKPCV FPFIFEGRSY SACTTKGRSD GYRWCATTAN YDQDKLYGFC PTRVDATVVG GNSAGELCVF PFVFLGKQYS SCTSDGRRDG RLWCATTSNF DTDKKWGFCP DQGYSLFLVA AHEFGHALGL DHSSVPEALM YPLYSYLEGF PLNKDDIDGI QYLYGRGSKP DPRPPATTTT EPQPTAPPTM CPTIPPTAYP TVGPTVGPTG APSPGPTSSP SPGPTGAPSP GPTAPPTAGS SEASTESLSP ADNPCNVDVF DAIAEIQGAL HFFKDGWYWK FLNHRGSPLQ GPFLTARTWP ALPATLDSAF EDPQTKRVFF FSGRQMWVYT GKTVLGPRSL DKLGLGPEVT HVSGLLPRRL GKALLFSKGR VWRFDLKSQK VDPQSVIRVD KEFSGVPWNS HDIFQYQDKA YFCHGKFFWR VSFQNEVNKV DHEVNQVDDV GYVTYDLLQC P<HHHHHH>

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