

# Recombinant Rat MMP9 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP52382

Size: 10ug, 100ug

Protein Name: Matrix metalloproteinase-9 (MMP-9) (EC 3.4.24.35) (92 kDa gelatinase) (92 kDa type IV collagenase) (Gelatinase B) (GELB)

Synonym: Mmp9

UniProt ID: P50282

UniProt Link: [www.uniprot.org/uniprotkb/P50282/entry](http://www.uniprot.org/uniprotkb/P50282/entry)

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 708 AA

Molecular Weight: 79 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MSPWQPLLLVLLALGYSAAPHQRQPTYVVFPRDLKTSNLTD TQLAEDYLYRYGYTRAAQMMGEKQ  
SLRPALLMLQKQLSLPQTGELDSETLKAIRSPRCGVDPVGKFQTFDGD LKWHHHNITYWIQSYTEDL  
PRDVIDDSFARAFVWSAVTPLTFTRVYGLEADIVIQFGVAEHG DGYPDFGKDGLLAHAFPPGPGIQ  
GDAHFDDELWSLGKGA VPTYFGNANGAPCHFPTFEGRSYLSCTTDGRNDGKPWC GTTADYD  
TDRKYGF CPSENLYTEHNGDGKPCVFPFIFEGHSYSACTTKGRSDGYRWCATTANYDQDKADGF  
CPTRADVTVTGGNSAGEMCVFPFVFLGKQYSTCTSEGRSDGRLWCATT SNFDADKKWGFCDQG  
YSLFLVAAHEFGHALGLDHSSVPEALMYP MYHYHEDSPLHEDDIKGIHHLYGRGSKPDPRPPATTAA  
EPQPTAPPTMCSTAPPMAYPTGGPTVAPT GAPSPGPTGPPTAGPSEAPTESSTPDDNPCNVDVFD  
AIADIQ GALHFFKDG RYWKFSNHGGNQLQGPF LIARTWPAFPSKLNSAFEDPQPKKIFFFLWAQMW  
VYTGQSVLGP RSLDKLGLGSEVTLVTG LLLPRRGKALLISRERIWKFDLKSQKVDPQSVTRLDNEFS  
GVPWNSHN VFQYQDKAYFCHDKYFWRV SFHNRVNQVDHVAYVTYDLLQCP

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant Matrix metalloproteinase-9 (MMP-9) (EC 3.4.24.35) (92 kDa gelatinase) (92 kDa type IV collagenase) (Gelatinase B) (GELB) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** Matrix metalloproteinase that plays an essential role in local proteolysis of the extracellular matrix and in leukocyte migration (By similarity). Could play a role in bone osteoclastic resorption (By similarity). Cleaves KiSS1 at a Gly-I-Leu bond (By similarity). Cleaves NINJ1 to generate the Secreted ninjurin-1 form (By similarity). Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide (By similarity).

**Subcellular Localization:** Secreted, extracellular space, extracellular matrix .

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.