

Recombinant Human MMP9 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50676

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) [Cleaved into: 67 kDa matrix metalloproteinase-9; 82 kDa matrix metalloproteinase-9]

Synonym: MMP9, CLG4B

UniProt ID: P14780

UniProt Link: www.uniprot.org/uniprotkb/P14780/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 707 AA

Molecular Weight: 78 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSLWQPLVLVLLVLGCCFAAPRQRQSTLVLFPGDLRTNLTDRQLAEEYLYRYGYTRVAEMRGESKS
LGPALLLLQKQLSLPETGELDSATLKAMRTPRCGVDPDLGRFQTFEGDLKWHHHNITYWIQNYSEDLP
RAVIDDAFARAFALWSAVTPLTFTRVYSRDADIVIQFGVAEHGDGYFPDGDGLLAHAFPPGPGIQQ
DAHFDDELWSLKGKGVVPTFRGNADGAACHFPFIFEGRSYSACTTDGRSDGLPWCSTTANYDTD
DRFGFCPSERLYTQDGNADGKPCQFPFIFQGQSYSACTTDGRSDGYRWCATTANYDRDKLFGFCP
TRADSTVMGGNSAGELCVFPFTFLGKEYSTCTSEGRGDGRLWCATTSNFSDSKKWGFCPDQGYSL
FLVAAHEFGHALGLDHSSVPEALMYPMYRFTEGPPLHKDDVNGIRHLYGPRPEPEPRPPTTTTPQP
TAPPTVCPTGPPTVHPSERPTAGPTGPPSAGPTGPPTAGPSTATTVPLSPVDDACNVNIFDAIAEIGN
QLYLFDKGKYWRFSEGRGSRPQGPFLIADKWPALPRKLDVFEERLSKKLFFFSGRQVWVYTGASV
LGPRRLDKLGLGADVAQVTGALRSGRGKMLLFSGRRLWRFDVKAQMVDPRSASEVDRMFPGVPL
DTHDVFQYREKAYFCQDRFYWRVSSRSELNQVDQVGYVTYDILQCPED

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) [Cleaved into: 67 kDa matrix metalloproteinase-9; 82 kDa matrix metalloproteinase-9] 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 (PubMed:12879005, PubMed:1480034, PubMed:2551898). Could play a role in bone osteoclastic resorption (By similarity). Cleaves KiSS1 at a Gly-|-Leu bond (PubMed:12879005). Cleaves NINJ1 to generate the Secreted ninjurin-1 form (PubMed:32883094). Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments (PubMed:1480034). Degrades fibronectin but not laminin or Pz-peptide.

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.