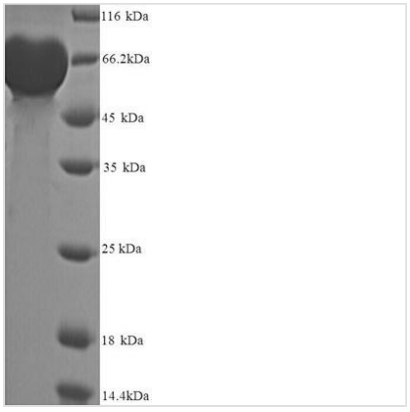
Recombinant Human Matrix metalloproteinase-9 (MMP9), partial

Product Code	CSB-YP014679HU
Relevance	May play an essential role in local proteolysis of the Extracellular domain matrix and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-|-Leu bond. 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.
Abbreviation	Recombinant Human MMP9 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P14780
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	FQTFEGDLKWHHHNITYWIQNYSEDLPRAVIDDAFARAFALWSAVTPLTFTRV YSRDADIVIQFGVAEHGDGYPFDGKDGLLAHAFPPGPGIQGDAHFDDDELWS LGKGVVVPTRFGNADGAACHFPFIFEGRSYSACTTDGRSDGLPWCSTTANYD TDDRFGFCPSERLYTQDGNADGKPCQFPFIFQGQSYSACTTDGRSDGYRWC ATTANYDRDKLFGFCPTRADSTVMGGNSAGELCVFPFTFLGKEYSTCTSEGR GDGRLWCATTSNFDSDKKWGFCPDQGYSLFLVAAHEFGHALGLDHSSVPEA LMYPMYRFTEGPPLHKDDVNGIRHLYGPRPEPEPRPPTTTTPQPTAPPTVCPT GPPTVHPSERPTAGPTGPPSAGPTGPPTAGPSTATTVPLSPVDDACNVNIFDA IAEIGNQLYLFKDGKYWRFSEGRGSRPQGPFLIADKWPALPRKLDSVFEERLS KKLFFFSGRQVWVYTGASVLGPRRLDKLGLGADVAQVTGALRSGRGKMLLFS GRRLWRFDVKAQMVDPRSASEVDRMFPGVPLDTHDVFQYREKAYFCQDRFY WRVSSRSELNQVDQVGYVTYDILQCPED
Research Area	Developmental Biology
Source	Yeast
Target Names	MMP9
Protein Names	Recommended name: Matrix metalloproteinase-9 Short name= MMP-9 EC= 3.4.24.35Alternative name(s): 92 kDa gelatinase 92 kDa type IV collagenase Gelatinase B Short name= GELBCleaved into the following 2 chains: 1. 6
Expression Region	107-707aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged

Mol. Weight	68.6kDa
Protein Length	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The gene encoding the human MMP9 (107-707aa) was cloned into a plasmid and expressed in yeast cells as an N-terminal fusion to a 6xHis tag. The recombinant human MMP9 protein is harvested from the culture supernatant of the transformed yeast cells and purified through affinity chromatography. Its purity reaches over 90% as assessed by SDS-PAGE.

Human MMP9 plays a crucial role in degrading the extracellular matrix (ECM) during normal tissue remodeling [1][2]. MMP9 degrades basement membrane proteins in the ECM [6]. Elevated levels of MMP9 have been associated with various pathological conditions, including chronic inflammation and different types of cancers such as oral, breast, and renal cell carcinomas [3][4][5]. Furthermore, MMP9 has been found to modulate tight junction integrity and cell viability in human airway epithelia, affecting epithelial health and barrier function.

References:

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Shelf Life

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