

ARG70330 Rat MMP9 recombinant protein (Active) (His-tagged, C-ter)

Package: 20 µg
Store at: -20°C

Summary

Product Description	HEK293 expressed, His-tagged (C-ter) Active Rat MMP9 recombinant protein.
Tested Reactivity	Rat
Tested Application	FuncSt, SDS-PAGE
Target Name	MMP9
Species	Rat
A.A. Sequence	Leu35 - Pro708 of Rat MMP9 (NP_038627.1) with 6X His tag at the C-terminus.
Expression System	HEK293
Activity	Active
Activity Note	Measured in a cell migration assay using HeLa cells. 1 ng/ml of Recombinant Rat MMP-9 can effectively induce HeLa cells migration.
Alternate Names	Matrix metalloproteinase-9; 92 kDa gelatinase; MMP-9; Gelatinase B; GELB; CLG4B; MANDP2; EC 3.4.24.35; 92 kDa type IV collagenase

Properties

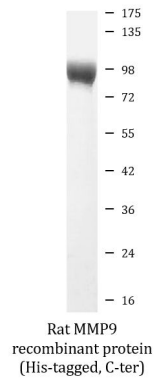
Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)
Buffer	50 mM Tris (pH 7.5), 10 mM CaCl ₂ and 150 mM NaCl.
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MMP9
Gene Full Name	matrix metalloproteinase 9
Background	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The enzyme encoded by this gene degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. [provided by RefSeq, Jul 2008]
Function	May play an essential role in local proteolysis of the extracellular 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. [UniProt]
Calculated Mw	78 kDa
PTM	Processing of the precursor yields different active forms of 64, 67 and 82 kDa. Sequentially processing by MMP3 yields the 82 kDa matrix metalloproteinase-9.
	N- and O-glycosylated. [UniProt]
Cellular Localization	Secreted, extracellular space, extracellular matrix. [UniProt]

Images



ARG70330 Rat MMP9 recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70330 Rat MMP9 recombinant protein (Active) (His-tagged, C-ter).