



# Recombinant Rat 72 kDa type IV collagenase (Mmp2)

<b>Product Code</b>	CSB-EP014666RA-B
<b>Storage</b>	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.
<b>Uniprot No.</b>	P33436
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	YNFFPRKPKWDKNQITYRIIGYTPDLDPETVDDAFARALKVWSDVTPLRFSRIH DGEADIMINFRWEHGDGYPFDGKDLLAHAFAPGTGVGGDSHFDDDELWT LGEGQVVRVKYGNADGEYCKFPFLFNGREYSSCTDTGRSDGFLWCSTTYNF EKDGKYGFCPHEALFTMGGNGDGQPCFPFRFQGTSYNSCTTEGRTDGYR WCGTTEDYDRDKKYGFCPETAMSTVGGNSEGAPCVFPFTFLGNKYESCTSA GRSDGKVCATTTNYDDDRKWGFCPDQGYSLFLVAAHEFGHAMGLEHSQD PGALMAPIYTYTKNFRLSNDDIKGIQELYGSPDADTDTGTGPTPTLGPVTP CKQDIVFDGIAQIRGEIFFFKDRFIWRTVTPRDKPTGPLLVATFWPELPEKIDAV YEAPQEEKAVFFAGNEYWVYSASTLERGYPKPLTSLGLPPDVQQVDAAFNWS KNKKTYIFSGDKFWRYNEVKKKMDPGFPKLIADSWNAIPDNLDAVVDLQGGG HSYFFKGAYYLKLENQSLKSVKFGSIKSDWLGC
<b>Research Area</b>	Others
<b>Source</b>	E.coli
<b>Target Names</b>	Mmp2
<b>Protein Names</b>	Recommended name: 72 kDa type IV collagenase EC= 3.4.24.24 Alternative name(s): 72 kDa gelatinase Gelatinase A Matrix metalloproteinase-2 Short name= MMP-2 Cleaved into the following chain: 1. PEX
<b>Expression Region</b>	110-662aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4? for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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. This gene encodes an enzyme which degrades type IV collagen,



the major structural component of basement membranes. The enzyme plays a role in endometrial menstrual breakdown, regulation of vascularization and the inflammatory response. Mutations in this gene have been associated with Winchester syndrome and Nodulosis-Arthropathy-Osteolysis (NAO) syndrome. Two transcript variants encoding different isoforms have been found for this gene.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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