Recombinant Rat MMP2 Protein (110-662 aa), His-SUMO-tagged

Cat. No. MMP2-657R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat MMP2 Protein (110-662 aa) is produced by E. coli expression system. This protein is fused with a 6xHis-SUMO tag at the N-terminal. Protein Description: Full Length of Mature Protein.
Species	Rat
Source	E.coli
ProteinLength	110-662 aa
Description	Ubiquitinous metalloproteinase that is involved in diverse functions such as rodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading Extracellular domain matrix proteins, can also act on several nonmatrix proteins such as big endothelial 1 and beta-type CGRP promoting vasoconstriction. Also cleaves KISS at a Gly-|-Leu bond. Appears to have a role in myocardial cell death pathways. Contributes to myocardial oxidative stress by regulating the activity of GSK3beta. Cleaves GSK3beta in vitro. Involved in the formation of the fibrovascular tissues .PEX, the C-terminal non-catalytic fragment of MMP2, posseses anti-angiogenic and anti-tumor properties and inhibits cell migration and cell adhesion to FGF2 and vitronectin. Ligand for integrin alpha-v/beta3 on the surface of blood vessels.
Form	Tris-based buffer, 50% glycerol

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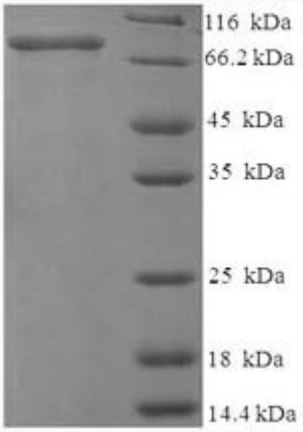
Molecular Mass	78.1 kDa
AA Sequence	YNFFPRKPKWDKNQITYRIIGYTPDLDPETVDDAFARALKVWSDVTPLRFSRIHDGE ADIMINFGRWEHGDGYPFDGKDGLLAHAFAPGTGVGGDSHFDDDELWTLGEGQVV RVKYGNADGEYCKFPFLFNGREYSSCTDTGRSDGFLWCSTTYNFEKDGKYGFCPH EALFTMGGNGDGQPCKFPFRFQGTSYNSCTTEGRTDGYRWCGTTEDYDRDKKYG FCPETAMSTVGGNSEGAPCVFPFTFLGNKYESCTSAGRSDGKVWCATTTNYDDDR KWGFCPDQGYSLFLVAAHEFGHAMGLEHSQDPGALMAPIYTYTKNFRLSNDDIKGI QELYGPSPDADTDTGTGPTPTLGPVTPEICKQDIVFDGIAQIRGEIFFFKDRFIWRTVT PRDKPTGPLLVATFWPELPEKIDAVYEAPQEEKAVFFAGNEYWVYSASTLERGYPK PLTSLGLPPDVQQVDAAFNWSKNKKTYIFSGDKFWRYNEVKKKMDPGFPKLIADSW NAIPDNLDAVVDLQGGGHSYFFKGAYYLKLENQSLKSVKFGSIKSDWLGC
Purity	> 90% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
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 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.
Concentration	A hardcopy of COA with concentration instruction is sent along with the products.

GENE INFORMATION

Gene Name	Mmp2 matrix metallopeptidase 2 [Rattus norvegicus]
Official Symbol	MMP2

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Synonyms	MMP2; MMP-2; gelatinase A; 72 kDa gelatinase;
Gene ID	81686
mRNA Refseq	NM_031054
Protein Refseq	NP_112316
UniProt ID	P33436



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

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