



# Recombinant Human MMP-2 (C-6His)

<b>Catalog #</b>	EPT010
<b>Expression Host</b>	Human Cells
<b>DESCRIPTION</b>	Recombinant Human Matrix Metalloproteinase-2 is produced by our Mammalian expression system and the target gene encoding Ala30-Cys660 is expressed with a 6His tag at the C-terminus. The proenzyme needs to be activated by APMA for an activated form.
<b>Accession</b>	P08253
<b>Synonyms</b>	72 kDa Type IV Collagenase; 72 kDa Gelatinase; Gelatinase A; Matrix Metalloproteinase-2; MMP-2; TBE-1; MMP2; CLG4A
<b>Mol Mass</b>	72 KDa
<b>AP Mol Mass</b>	72 KDa, reducing conditions
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>FORMULATION</b>	Lyophilized from a 0.2 μm filtered solution of 20mM





Tris-HCl, 150mM NaCl, pH 7.5.

## RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

## BACKGROUND

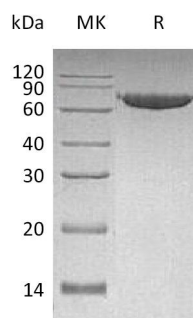
72 kDa type IV collagenase also known as matrix metalloproteinase-2 (MMP-2) and gelatinase A is an enzyme that in humans is encoded by the MMP2 gene. It belongs to the matrix metalloproteinase (MMP) family. Matrix metalloproteinases (MMPs) are a





family of zinc-dependent endopeptidases that degrade components of the extracellular matrix (ECM) and play essential roles in various physiological processes such as morphogenesis, differentiation, angiogenesis and tissue remodeling, as well as pathological processes including inflammation, arthritis, cardiovascular diseases, pulmonary diseases and tumor invasion. MMP-2 is ubiquitous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, atherosclerotic plaque rupture, as well as degrading extracellular matrix proteins. MMP-2 can also act on several nonmatrix proteins such as big endothelial 1 and beta-type CGRP promoting vasoconstriction. MMP-2 cleaves KISS at a Gly-|-Leu bond and appears to have a role in myocardial cell death pathways.

## SDS-PAGE





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