

Recombinant Human MMP2 protein (His tag)

Catalog No. PDMH100117

Note: Centrifuge before opening to ensure complete recovery of vial contents.

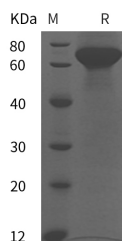
Description

Synonyms	72 kDa Type IV Collagenase;72 kDa Gelatinase;Gelatinase A;Matrix Metalloproteinase-2;MMP-2;TBE-1;MMP2;CLG4A;CLG4;MMP-II;MONA;TBE-1
Species	Human
Expression Host	HEK293 Cells
Sequence	Met1-Cys660
Accession	P08253
Calculated Molecular Weight	72.5 kDa
Observed molecular weight	75 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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-I-Leu bond and appears to have a role in myocardial cell death pathways.