



Recombinant Protein Technical Manual

Recombinant Human MMP-2 Protein (His Tag)

RPES4601

Product Data:

Product SKU: RPES4601

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: NP_004521.1

Protein Information:

Molecular Mass: 72.01 kDa

AP Molecular Mass: 69 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 7.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 72 kDa Type IV Collagenase; 72 kDa Gelatinase; Gelatinase A; Matrix Metalloproteinase-2; MMP-2; TBE; MMP2; CLG4A;CLG4;MMP-II;MONA;TBE

Immunogen Information:

Sequence: Ala30-Cys660

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.