## For Research Use Only

## Recombinant Human MMP-3 protein (His Tag)



Catalog Number: Eg0382

**Basic Information** 

Species: Human

Purity: >90 %, SDS-PAGE

Tag: His Tag

**Technical Specifications** 

Purity: >90 %, SDS-PAGE

**Endotoxin Level:** 

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human MMP-3 protein Tyr18-Cys477 (Accession# P08254) with a His tag at the C-terminus.

GeneID:

Accession: P08254

**Predicted Molecular Mass:** 56 kDa

**SDS-PAGE:** 

55-65 kDa, reducing (R) conditions

Lyophilized from 0.22  $\,\mu$  m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

**Biological Activity** 

Not tested

Storage and Shipping

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20°C to -80°C as lyophilized proteins.

3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

**Background** 

MMP-3 (matrix metallopeptidase 3), also named as Stromelysin 1 or STR1, is a member of matrix metalloproteinase (MMP) family. The MMP family of enzymes is comprised of critically important extracellular matrix remodeling proteases whose activity has been implicated in normal embryogenesis and tissue remodelling and in many diseases such as arthritis, cancer, periodontitis, glomerulonephritis, encephalomyelitis, atherosclerosis and tissue ulceration. These proteases have come to represent important therapeutic and diagnostic targets for the treatment and detection of human cancers. MMP-3 is secreted from the cells as a proenzyme. The proenzyme has been shown to stimulate plasminogen activation. The active MMP-3 is capable of cleaving types III, IV, IX and X collagen, aggrecan, fbronectin, laminin, IGFBP-3, sernins and II - 1 8. serpins, and IL-1 β.

References

- 1. Roy R. et al. (2009) Journal of Clinical Oncology. 27(31):5287-5297.
  2. Nagase H. et al. (1994) Contributions to Nephrology. 107:85.
  3. Stamenkovic I. et al. (2003) The Journal of Pathology. 200(4):448-464.
  4. Pytliak M. et al. (2012) Onkologie. 35(1-2):49-53.
  5. Begoña Arza. et al. (2000). Febs Journal. 267(21):6378.
- 6. Fan. et al. (2011) International Journal of Molecular Medicine. 27(4).

Synonyms

MMP3, EC:3.4.24.17, Matrix metalloproteinase-3, MMP 3, MMP-3

## **Selected Validation Data**



Purity of Recombinant Human MMP-3 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.