

# Recombinant human MMP-14/MT1-MMP protein

Catalog Number: ATGP3460

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

21-538aa

### UniProt No.

P50281

### NCBI Accession No.

NP\_004986

### Alternative Names

Matrix metalloproteinase-14, MMP14, MMP-14, MMP-X1, MT-MMP, MT-MMP 1, MT1-MMP, MT1MMP, MTMMP1, WNCHRS

## PRODUCT SPECIFICATION

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### Molecular Weight

59.9 kDa (527aa)

### Concentration

0.25mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

MMP14, also known as matrix metalloproteinase-14, is a membrane-anchored zinc-binding endopeptidase that is expressed at the leading edge of various invasive carcinomas and promotes tumor cell invasion through degradation of the extracellular matrix. It plays an important role in extracellular matrix (ECM) remodeling by

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being able to degrade type I collagen, activate pro-MMP-2 and process cell adhesion molecules such as CD44 and integrin alpha V. It is a key enzyme in many physiological and pathological processes such as angiogenesis and tumor invasion. Recombinant human MMP14, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

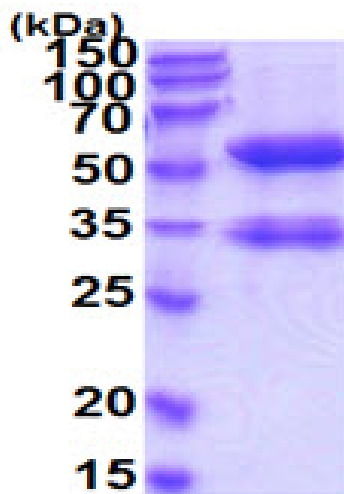
ADLALASLGS AQSSSFSPA WLQQYGYLPP GDLRTHQRS PQSLSAIAA MQKFYGLQVT GKADADTMKA MRRPRCGVPD  
KFGAEIKANV RKRKRYAIQGL KWQHNEITFC IQNYTPKVG EYATYEAIRKA FRVWESATPL RFREVPYAYI REGHEKQADI  
MIFFAEGFHG DSTPFDEGG FLAHAYFPG NIGGDTHFDS AEPWTVRNE D L N G N D I F L V A V H E L G H A L G L E H S S D P S A I M  
APFYQWMDTE NFVLPDDRR GIQQLYGGES GFPTKMPPQP RTTSRPSVPD KPKNPTYGPN ICDGNFDTVA MLRGEMFVFK  
ERWFWRVRNN QVMDGYPMPI GQFWRGLPAS INTAYERKDG KVFVFKGDH WVFDEASLEP GYPKHIKELG RGLPTDKIDA  
ALFWMPNGKT YFFRGNKYR FNEELRAVDS EYPKNIKVWE GIPESPRGSF MGSDEVFTYF YKGNKYWKFN NQKLKVEPGY  
PKSALRDWMG CPSGGRPDEG TEEETEVIIEVDEEGGGAV SHHHHHH

## General References

Arndt A., et al. (2015) Biomed Res Int. 2015:185404.  
Seiki M., et al. (2003) Cancer Lett. 194:1-11.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)