

RPA101Ra02 50µg

Recombinant Matrix Metalloproteinase 3 (MMP3)

**Organism Species: Rattus norvegicus (Rat)** 

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)



### [PROPERTIES]

**Source:** Prokaryotic expression.

Host: E. coli

Residues: Phe98~Cys475
Tags: N-terminal His-Tag
Tissue Specificity: Kidney.

**Subcellular Location:** Secreted, extracellular space, extracellular matrix.

**Purity: >90%** 

Traits: Freeze-dried powder

Buffer formulation: 100mM NaHCO<sub>3</sub>, 500mM NaCl, pH8.3, containing 1mM

EDTA, 1mM DTT, 0.01% sarcosyl, 5%Trehalose and Proclin300.

Original Concentration: 200ug/mL

Applications: SDS-PAGE; WB; ELISA; IP; CoIP; Purification; Amine Reactive

Labeling.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.5

Predicted Molecular Mass: 46.2kDa

Accurate Molecular Mass: 55kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

- 1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
- 2. Relative charge: The composition of amino acids may affects the charge of the protein.
- 3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
- 4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
- 5. Polymerization of the target protein: Dimerization, multimerization etc.

### [USAGE]

Reconstitute in 100mM NaHCO $_3$ , 500mM NaCl (pH8.3) to a concentration of 0.1-1.0 mg/mL. Do not vortex.



## [STORAGE AND STABILITY]

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

# [SEQUENCE]

FST
FPGSPKWRKN HISYRIVNYT LDLPRESVDS AIERALKVWE EVTPLTFSRI
SEGEADIMIS FAVEEHGDFI PFDGPGMVLA HAYAPGPGTN GDAHFDDDER
WTDDVTGTNL FLVAAHELGH SLGLFHSANA EALMYPVYKS STDLARFHLS
QDDVDGIQSL YGPPTESPDV LVVPTKSNSL DPETLPMCSS ALSFDAVSTL
RGEVLFFKDR HFWRKSLRTP EPGFYLISSF WPSLPSNMDA AYEVTNRDTV
FILKGNQIWA IRGHEELAGY PKSIHTLGLP ETVQKIDAAI SLKDQKKTYF
FVEDKFWRFD EKKQSMDPEF PRKIAENFPG IGTKVDAVFE AFGFLYFFSG
SSQLEFDPNA GKVTHILKSN SWFNC

### [IDENTIFICATION]

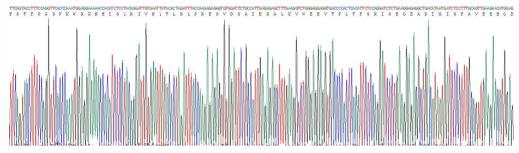


Figure 1. Gene Sequencing (Extract)

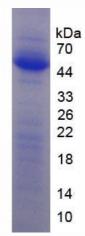


Figure 2. SDS-PAGE