

**EPA099Ra61 100ug**

**Eukaryotic Matrix Metalloproteinase 13 (MMP13)**

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

***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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11th Edition (Revised in May, 2016)

## **[ PROPERTIES ]**

**Source:** Eukaryotic expression.

**Host:** 293F cell

**Residues:** Leu14~Cys466

**Tags:** N-terminal His Tag

**Homology:** Human 87%, mouse 97%

**Tissue Specificity:** Lung.

**Subcellular Location:** Secreted. Extracellular matrix.

**Purity:** >98%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Traits:** Freeze-dried powder

**Buffer Formulation:** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 5%Trehalose and Proclin300.

**Original Concentration:** 200ug/mL

**Predicted isoelectric point:** 5.1

**Predicted Molecular Mass:** 53.4kDa

**Accurate Molecular Mass:** 60kDa as determined by SDS-PAGE reducing conditions.

**Applications:** SDS-PAGE; WB; ELISA; IP; CoIP; EMSA; Reporter Assays; Purification; Amine Reactive Labeling.

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

**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 20mM Tris, 150mM NaCl (pH8.0) 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 ]**

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LPLPYGD DDDDDLSEED LEFAEHYLKS YYHPVTLAGI
LKKSTVTSTV DRLREMQSFF GLDVTGKLDD PTLDIMRKPR CGVPDVG VYN
VFPRTLKWSQ TNLTYRIVNY TPDISHSEVE KAFRKAFKVV SDVTPLNFTR
IHDGTADIMI SFGTKEHGDF YPFDGPSGLL AHAFPPGPLN GGDAHFDDDE
TWTSSSKGYN LFIVAAHEL G HSLGLDHSKD PGALMFPIYT YTGKSHFMLP
DDD VQGIQSL YGPGDEDPNP KHPKTPEKCD PALSLDAITS LRGETMIFKD
RFFWRLHPQQ VEPELFLT KS FWPELPNHVD AAYEHPSRDL MFIFRGRKFW
ALNGYDIMEG YPRKISDLGF PKEVKRLSAA VHFEDTGKTL FFSGNHVWSY
DDANQTM D KD YPR LIEE EFP GIGDKVDAVY EKNGYIYFFN GPIQFEYSIW
SNRIVRVMPT NSLLWC
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