

For Research Use Only

# MMP1 Recombinant antibody

Catalog Number: 83114-2-RR



## Basic Information

**Catalog Number:**

83114-2-RR

**Size:**

100ul , Concentration: 1000 ug/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

BC013875

**GeneID (NCBI):**

4312

**UNIPROT ID:**

P03956

**Full Name:**

matrix metalloproteinase 1 (interstitial collagenase)

**Calculated MW:**

54 kDa

**Observed MW:**

45-48 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

230343G1

**Recommended Dilutions:**

WB 1:2000-1:10000

IF/ICC 1:50-1:500

## Applications

**Tested Applications:**

WB, IF/ICC, FC (Intra), ELISA

**Species Specificity:**

human

**Positive Controls:**

WB : MDA-MB-231 cells,

IF/ICC : HepG2 cells,

## Background Information

MMP1, also named as CLG, belongs to the peptidase M10A family. MMP is the main enzyme that cleaves fibrillar collagen, namely types I, II, III, VII, and X. It is involved in cell migration and invasion, and is frequently up-regulated in cancer cells. It can be cleavage to two major forms (22 kDa and 27 kDa) by undergoing autolytic, and the minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase. The sizes of pro-MMP-1 and active MMP-1 from human synovial fibroblasts have been reported as 52 to 56 kDa, depending on glycosylation, and 41 to 45 kDa, respectively. In addition, a band of 62-kDa observed in the current study is pro-MMP-1 (PMID:9418730).

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

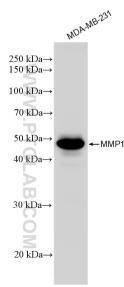
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

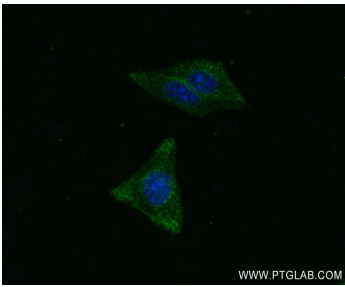
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

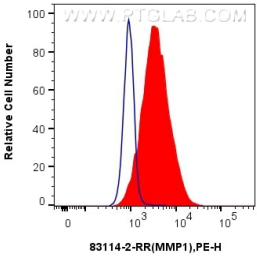
## Selected Validation Data



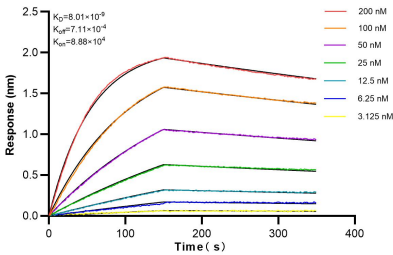
MDA-MB-231 cells were subjected to SDS PAGE followed by western blot with 83114-2-RR (MMP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MMP1 antibody (83114-2-RR, Clone: 230343G1) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug MMP1 Recombinant antibody (83114-2-RR, Clone:230343G1) and PE-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Bi-layer interferometry (BLI) kinetic assays of 83114-2-RR against Human MMP1 were performed. The affinity constant is 8.01 nM.