

MMP1 Recombinant antibody, PBS Only

Catalog Number: **83114-2-PBS**

Basic Information

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|--|--|---|
| Catalog Number: 83114-2-PBS | GenBank Accession Number: BC013875 | Purification Method: Protein A purification |
| Size: 100ug , Concentration: 1mg/ml by Nanodrop; | GeneID (NCBI): 4312 | CloneNo.: 230343G1 |
| Source: Rabbit | UNIPROT ID: P03956 | |
| Isotype: IgG | Full Name: matrix metalloproteinase 1 (interstitial collagenase) | |
| | Calculated MW: 54 kDa | |
| | Observed MW: 45-48 kDa | |

Applications

Tested Applications:
Indirect ELISA, IF/ICC, WB

Species Specificity:
human

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

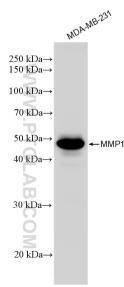
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

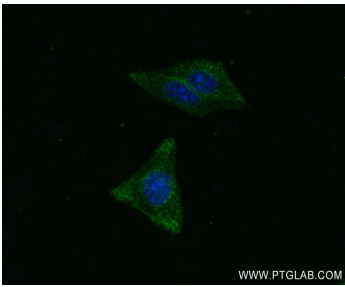
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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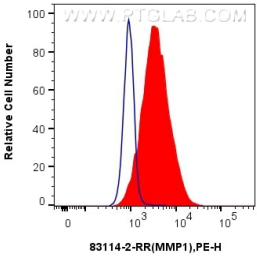
Selected Validation Data



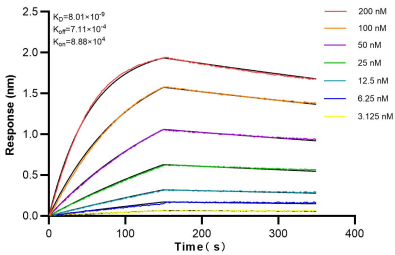
MDA-MB-231 cells were subjected to SDS PAGE followed by western blot with 83114-2-RR (MMP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83114-2-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83114-2-PBS in a different storage buffer formulation.



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug MMP1 Recombinant antibody (83114-2-RR, Clone:230343G1) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83114-2-PBS in a different storage buffer formulation.



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