### For Research Use Only

# MMP2 Monoclonal antibody

Catalog Number:66366-1-lg Featured Product

**52 Publications** 



**Basic Information** 

Catalog Number: GenBank Accession Number: 66366-1-lg

BC002576 GeneID (NCBI): Size: 2B10D1

150ul, Concentration: 1100 µg/ml by 4313 Nanodrop and 1000 µg/ml by Bradford<sub>Full Name</sub>:

method using BSA as the standard;

matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) Mouse

Calculated MW: Isotype: lgG1 72 kDa

Observed MW: Immunogen Catalog Number: AG25039 55-74 kDa

**Applications** 

**Tested Applications:** IHC, WB, ELISA

**Cited Applications:** IF, IHC, WB

Species Specificity: human, rat, mouse, pig

**Cited Species:** human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Purification Method:** Protein A purification

CloneNo.:

Recommended Dilutions:

WB 1:1000-1:6000 IHC 1:150-1:600

**Positive Controls:** 

WB: HepG2 cells, human placenta tissue, pig heart tissue, rat heart tissue, human heart tissue, MCF-7 cells

IHC: human breast cancer tissue,

# **Background Information**

MMP2, also named as CLG4A, Gelatinase Am, TBE-1 and PEX, belongs to the peptidase M10A family. It is ubiquitinous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. MMP2 contributes to myocardial oxidative stress by regulating the activity of GSK3beta. It cleaves GSK3beta in vitro. MMP2 can be cleaved into PEX chain(~60kd). Western blot analysis showed that the 72 kDa and 62 kDa proteinase activities were pro-MMP2 and the active enzyme, respectively (PMID:11112697).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Wenjing Guo	33117682	Front Oncol	WB
Wei Zhou	34646828	Front Cell Dev Biol	WB
Yu-Feng Liu	34603071	Front Physiol	WB,IHC

Storage

Storage:

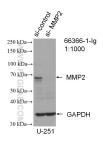
Store at -20°C. Stable for one year after shipment.

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

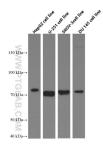
Aliquoting is unnecessary for -20°C storage

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

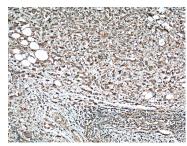
## **Selected Validation Data**



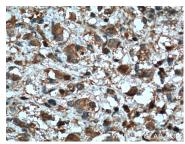
WB result of MMP2 antibody (66366-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MMP2 transfected U-251 cells.



Western blot analysis of MMP2 in various cell lines using Proteintech antibody 66366-1-lg (MMP2 Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66366-1-Ig (MMP2 antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66366-1-lg (MMP2 antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).