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# **Recombinant MMP-2 Monoclonal Antibody**

catalog number: AN300112P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

Reactivity Human

Immunogen Recombinant Human MMP-2 protein

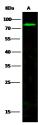
Host Rabbit
Isotype IgG
Clone A1226
Purification Protein A

Buffer 0.2 µm filtered solution in PBS

Applications Recommended Dilution

**WB** 1:500-1:1000

## Data



Western Blot with MMP-2 Monoclonal Antibody at dilution of 1:500. Lane A: MCF7 Whole Cell Lysate, Lysates/proteins at 30 µg per lane.

Observed-MW:73 kDa Calculated-MW:73 kDa

## **Preparation & Storage**

Storage This antibody can be stored at 2°C-8°C for one month without detectable loss of

activity. Antibody products are stable for twelve months from date of receipt when

Rev. V1.1

stored at -20  $^{\circ}\text{C}$  to -80  $^{\circ}\text{C}$  . Preservative-Free. Avoid repeated freeze-thaw cycles .

Shipping Ice bag

#### **Background**

Matrix Metalloproteinase-2 (MMP-2) is an enzyme that degrades components of the extracellular matrix and thus plays a pivotal role in cell migration during physiological and pathological processes. MMP-2 expression is dependent on extracellular matrix metalloproteinase inducer (EMMPRIN), Her2/neu, growth factors, cytokines, and hormones. Pro-MMP-2 activation needs MT1-MMP and TIMP-2 contribution. MMP-2 is changed in distribution and increased in amount in the ventral cochlear nucleus after unilateral cochlear ablation. A low level of MMP-2 is linked to a favorable prognosis in patients with a hormone receptor-negative tumor, usually associated with high risk. As a zymogen requiring proteolytic activation for catalytic activity, MMP-2 has been implicated broadly in the invasion and metastasis of many cancer model systems, including human breast cancer (HBC). Blocking MMP-2 secretion and activation during breast carcinoma development may decrease metastasis. The detection of active MMP-2 alone or the rate of pro-MMP-2 and active MMP-2 is considered a very sensitive indicator of cancer metastasis. Modulation of MMP-2 expression and activation through specific inhibitors and activators may thus provide a new mechanism for breast cancer treatment.

## For Research Use Only