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# Product datasheet for AM08198PU-N

## MMP2 Mouse Monoclonal Antibody [Clone ID: SB13a]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | SB13a |
| **Applications:** | ELISA, IHC |
| **Recommended Dilution:** | **ELISA:** 1/3,000-1/8,000.<br>**Immunohistochemistry** (Frozen/Paraffin): < / = 2 µg/ml. |
| **Reactivity:** | Human |
| **Host:** | Mouse |
| **Isotype:** | IgG1 |
| **Clonality:** | Monoclonal |
| **Immunogen:** | Recombinant MMP-2. |
| **Specificity:** | This antibody is specific for Human MMP-2.<br>Does not cross react to Human MMP-1, MMP-3 or MMP-9. |
| **Formulation:** | 100 mM Borate buffered saline, pH 8.2.<br>No preservatives or amine-containing buffer salts added.<br>State: Purified<br>State: Liquid purified Ig fraction. |
| **Concentration:** | lot specific |
| **Conjugation:** | Unconjugated |
| **Storage:** | Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.<br>Avoid repeated freezing and thawing. |
| **Stability:** | Shelf life: one year from despatch. |
| **Gene Name:** | matrix metallopeptidase 2 |
| **Database Link:** | Entrez Gene 4313 Human<br>P08253 |

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**Background:**

The matrix metalloproteinases (MMPs) are a family of at least eighteen secreted and membrane-bound zinc endopeptidases. Collectively, these enzymes can degrade all the components of the extracellular matrix, including fibrillar and non-fibrillar collagens, fibronectin, laminin and basement membrane glycoproteins. In general, a signal peptide, a propeptide, and a catalytic domain containing the highly conserved zinc-binding site characterizes the structure of the MMPs. In addition, fibronectin-like repeats, a hinge region, and a C terminal hemopexin-like domain allow categorization of MMPs into the collagenase, gelatinase, stomelysin and membrane type MMP subfamilies. All MMPs are synthesized as proenzymes, and most of them are secreted from the cells as proenzymes. Thus, the activation of these proenzymes is a critical step that leads to extracellular matrix breakdown. MMPs are considered to play an important role in wound healing, apoptosis, bone elongation, embryo development, uterine involution, angiogenesis and tissue remodeling, and in diseases such as multiple sclerosis, Alzheimer's, malignant gliomas, lupus, arthritis, periodontis, glumerulonephritis, atherosclerosis, tissue ulceration, and in cancer cell invasion and metastasis.
MMP2, also known as Gelatinase A, is a type IV collagenase that specifically cleaves type IV collagen, the major structural component of basement membranes. The metastatic potential of tumor cells has been found to correlate with the activity of this enzyme.

**Synonyms:**

MMP2, CLG4A, 72 kDa gelatinase, Matrix metalloproteinase-2, Gelatinase A, TBE-1