

## MMP-9 Polyclonal Antibody(Capture/Detector)

catalog number: **AN000320P**

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

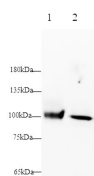
### Description

<b>Reactivity</b>	Mouse;Rat
<b>Immunogen</b>	Recombinant Mouse MMP-9 protein expressed by Mammalian
<b>Host</b>	Rabbit
<b>Isotype</b>	Rabbit IgG
<b>Purification</b>	Antigen Affinity Purification
<b>Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.05% Proclin300.

### Applications Recommended Dilution

<b>WB</b>	1:500-1:1000
<b>ELISA Capture</b>	2-8 µg/mL
<b>ELISA Detector</b>	0.1-0.4 µg/mL

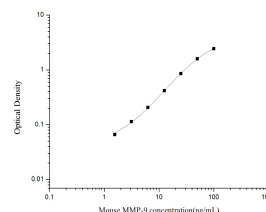
### Data



Western Blot with MMP-9 Polyclonal Antibody at dilution of 1:1000. Lane 1: Mouse lung, Lane 2: Rat lung

**Observed-MW: 84-92 kDa**

**Calculated-MW: 81 kDa**



Sandwich ELISA-Recombinant Mouse MMP-9 protein standard curve. Background subtracted standard curve using MMP-9 antibody(AN000320P)(Capture), MMP-9 antibody(AN000320P)(Detector) in sandwich ELISA. The reference range value for Recombinant Mouse MMP-9 protein is 1.56-100 ng/mL.

### Preparation & Storage

<b>Storage</b>	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
<b>Shipping</b>	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

### Background

### For Research Use Only

Matrix metalloproteinases (MMPs) are neutral proteinases that are involved in the breakdown and remodeling of the extracellular matrix (ECM) under a variety of physiological and pathological conditions, such as morphogenesis, differentiation, angiogenesis, and tissue remodeling, as well as pathological processes including inflammation, arthritis, cardiovascular diseases, pulmonary diseases, and tumor invasion. MMP9, also known as 92-kDa gelatinase B/type IV collagenase, is secreted from neutrophils, macrophages, and some transformed cells, and is the most complex family member in terms of domain structure and regulation of its activity. It plays an important role in tissue remodeling in normal and pathological inflammatory processes. MMP-9 is a major secretion product of macrophages and a component of cytoplasmic granules of neutrophils and is particularly important in the pathogenesis of inflammatory, infectious, and neoplastic diseases in many organs including the lung. This enzyme is also secreted by lymphocytes and stromal cells upon stimulation by inflammatory cytokines, or upon delivery of bi-directional activation signals following integrin-mediated cell-cell or cell-extracellular matrix (ECM) contacts. Since the integrity of the tissue architecture is closely dependent on the delicate balance between MMPs and their inhibitors, excessive production of MMP-9 is linked to tissue damage and degenerative inflammatory disorders. As a consequence, regulation of gene transcription and tissue-specific expression of MMP-9 in normal and diseased states are being actively investigated to pave the way for new therapeutic targets. Besides, the dramatic overexpression of MMP-9 in cancer and various inflammatory conditions points to the molecular mechanisms controlling its expression as a potential target for eventual rational therapeutic intervention.