





# Dog matrix metalloproteinase 9/Gelatinase B,MMP-9 ELISA Kit

| Product Code                    | CSB-E13887c  |
|---------------------------------|--|
| Abbreviation                    | MMP9   |
| Protein Biological<br>Process 1 | Developmental Protein  |
| Target Name                     | matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)  |
| Uniprot No.                     | O18733   |
| Alias                           | CLG4B, GELB, MANDP2, MMP-9, macrophage gelatinase matrix metalloproteinase 9 matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase) type V collagenase   |
| Product Type                    | ELISA Kit  |
| Immunogen Species               | Canis lupus familiaris (Dog) (Canis familiaris)  |
| Protein Biological<br>Process 3 | Collagen degradation   |
| Sample Types                    | serum, plasma  |
| Detection Range                 | 12.5 ng/mL-800 ng/mL   |
| Sensitivity                     | 3.12 ng/mL   |
| Assay Time                      | 1-5h   |
| Sample Volume                   | 50-100ul   |
| <b>Detection Wavelength</b>     | 450 nm   |
| Lead Time                       | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.   |
| Research Area                   | Cancer   |
| Gene Names                      | MMP9   |
| Tag Info                        | quantitative   |
| <b>Protein Description</b>      | Sandwich   |
| Description                     | This Dog MMP9 ELISA Kit was designed for the quantitative measurement of Dog MMP9 protein in serum, plasma. It is a Sandwich ELISA kit, its detection range is 12.5 ng/mL-800 ng/mL and the sensitivity is 3.12 ng/mL.           |
| Target Details                  | Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in |

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disease processes, such as arthritis and metastasis. Most MMP s are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The enzyme encoded by this gene degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling.

#### **Product Precision**

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

#### Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of dog MMP-9 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

| ?   | Sample    | Serum(n=4) |
|-----|-----------|------------|
| 1:1 | Average % | 99         |
|     | Range %   | 92-105     |
| 1:2 | Average % | 88         |
|     | Range %   | 80-96      |
| 1:4 | Average % | 87         |
|     | Range %   | 85-90      |
| 1:8 | Average % | 92         |
|     | Range %   | 88-107     |

## Recovery

The recovery of dog MMP-9 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range  |
|-------------------|--------------------|--------|
| Serum (n=5)       | 85                 | 81-89  |
| EDTA plasma (n=4) | 97                 | 90-105 |

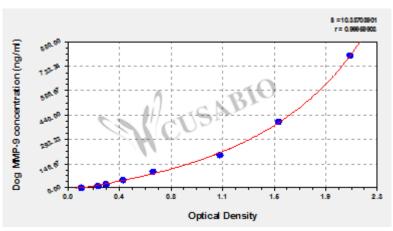
### **Typical**

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.









ng/ml OD1 OD2 Average Corrected

800 2.096 2.076 2.086 1.977 400 1.513 1.605 1.559 1.450 200 1.135 1.118 1.127 1.018 100 0.618 0.655 0.637 0.528 50  $0.423\,0.409\,0.416$ 0.307 25 0.301 0.278 0.290 0.181  $12.5 \quad 0.230 \, 0.228 \, 0.229$ 0.120 0 0.110 0.107 0.109 ?

**Msds** 

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