





# Mouse matrix metalloproteinase 13,MMP-13 **ELISA** kit

| Product Code                    | CSB-E07413m   |
|---------------------------------|---|
| Abbreviation                    | MMP13   |
| Protein Biological<br>Process 1 | Developmental Protein   |
| Target Name                     | matrix metallopeptidase 13 (collagenase 3)  |
| Uniprot No.                     | P33435  |
| Alias                           | CLG3, MANDP1, collagenase 3 matrix metalloproteinase 13 matrix metalloproteinase 13 (collagenase 3)   |
| Product Type                    | ELISA Kit   |
| Immunogen Species               | Mus musculus (Mouse)  |
| Protein Biological<br>Process 3 | Collagen degradation  |
| Sample Types                    | serum, plasma, tissue homogenates   |
| <b>Detection Range</b>          | 93.75 pg/mL-6000 pg/mL  |
| Sensitivity                     | 23.438 pg/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                      | Mmp13   |
| Tag Info                        | quantitative  |
| <b>Protein Description</b>      | Sandwich  |
| Description                     | This Mouse MMP13 ELISA Kit was designed for the quantitative measurement of Mouse MMP13 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 93.75 pg/mL-6000 pg/mL and the sensitivity is 23.438 pg/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 disease processes, such as arthritis and metastasis. Most MMP s are secreted |

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as inactive proproteins which are activated when cleaved by extracellular proteinases. This protein cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3.

#### **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 mouse MMP-13 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 % | 87         |
|     | Range %   | 85-100     |
| 1:2 | Average % | 92         |
|     | Range %   | 90-100     |
| 1:4 | Average % | 96         |
|     | Range %   | 92-100     |
| 1:8 | Average % | 93         |
|     | Range %   | 82-98      |

# Recovery

The recovery of mouse MMP-13 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)       | 92                 | 81-98  |
| EDTA plasma (n=4) | 94                 | 92-105 |

### **Typical**

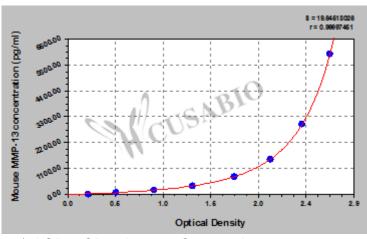
These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.











pg/ml OD1 OD2 Average Corrected

6000 2.720 2.642 2.681 2.453 3000 2.416 2.381 2.399 2.171 1500 2.112 2.043 2.078 1.850

750 1.732 1.690 1.711 1.483 375 1.337 1.244 1.291 1.063

187.5 0.914 0.876 0.895 0.667

93.75 0.534 0.492 0.513 0.285

0  $0.237\,0.219\,0.228$ ?

**Msds** 

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