Datasheet for ABIN6719913

# MMP2 ELISA Kit

## 1 Image

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## Overview

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|---|---|
| Quantity: | 1 kit |
| Target: | MMP2 |
| Reactivity: | Rat |
| Method Type: | Sandwich ELISA |
| Detection Range: | 625 pg/mL - 40000 pg/mL |
| Minimum Detection Limit: | 625 pg/mL |
| Application: | ELISA |

## Product Details

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| Purpose: | Rat MMP-2 Sandwich ELISA Kit for Quantitative Detection |
| Brand: | AccuSignal™ |
| Sample Type: | Cell Culture Supernatant, Plasma (heparin), Serum |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Specificity: | Production: Natural and recombinant rat total MMP-2. There is no detectable cross-reactivity with other relevant proteins. |
| Sensitivity: | < 10 pg/mL |
| Components: | • Antibody-coated 96-well plate<br>• Target Protein Standard<br>• Detection antibody |

## Product Details

- Detection reagent
- Diluent buffers
- Wash buffers
- Substrate Solution
- Stop solutions
- Adhesive covers

## Target Details

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|---|---|
| Target: | MMP2 |
| Alternative Name: | MMP-2 (MMP2 Products) |
| Background: | Synonyms: 72 kDa gelatinase, 72 kDa type IV collagenase, CLG 4, CLG 4A, CLG4, CLG4A, Collagenase type IV A, EC 3.4.24.24, Gelatinase A, Gelatinase alpha, Gelatinase neutrophil, Matrix metallopeptidase 2 (gelatinase A, 72 kDa gelatinase, 72 kDa type IV collagenase), Matrix metalloproteinase 2, Matrix metalloproteinase 2 (gelatinase A, 72kD gelatinase, 72kD type IV collagenase), Matrix metalloproteinase II, Matrix metalloproteinase-2, MMP 2, MMP II, MMP-2, MMP2, MMP2_HUMAN, MONA, Neutrophil gelatinase, PEX, TBE 1, TBE-1<br>Background: Type IV collagenase, 72-kD, is officially designated matrix metalloproteinase-2(MMP2). It is also known as gelatinase, 72-kD. MMP-2 plays an essential role in angiogenesis and arteriogenesis, two processes critical to restoration of tissue perfusion after ischemia. MMP-2 expression is increased in tissue ischemia, but the responsible mechanisms remain unknown.1 Matrix metalloproteinases(MMPs) catalyze extracellular matrix degradation. Control of their activity is a promising target for therapy of diseases characterized by abnormal connective tissue turnover. MMPs are expressed as latent proenzymes that are activated by proteolytic cleavage that triggers a conformational change in the propeptide(cysteine switch). The structure of proMMP-2 reveals how the propeptide shields the catalytic cleft and that the cysteine switch may operate through cleavage of loops essential for propeptide stability.2 The gene is localized to 16q21 using somatic cell hybrids and in situ hybridization.3 The standard product used in this kit is recombinant rat MMP-2, consisting of 662 amino acids with the molecular mass of 72KDa. The detected MMP-2 includes zymogen and active enzyme. |
| Gene ID: | 81686 |
| NCBI Accession: | NP_112316 |
| UniProt: | P33436 |
| Pathways: | Activation of Innate immune Response |

## Application Details

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| Application Notes: | Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1 mL per well of the 40000pg/mL, 20,000pg/mL,10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL rat MMP-2 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of rat cell culture supernates, serum or plasma (heparin) to each empty well. It is recommended that each rat MMP-2 standard solution and each sample be measured in duplicate. |
| Comment: | Standard: Expression system for standard: NSO, Immunogen sequence: A30-C662 |
| Sample Volume: | 100 µL |
| Plate: | Pre-coated |
| Restrictions: | For Research Use only |

## Handling

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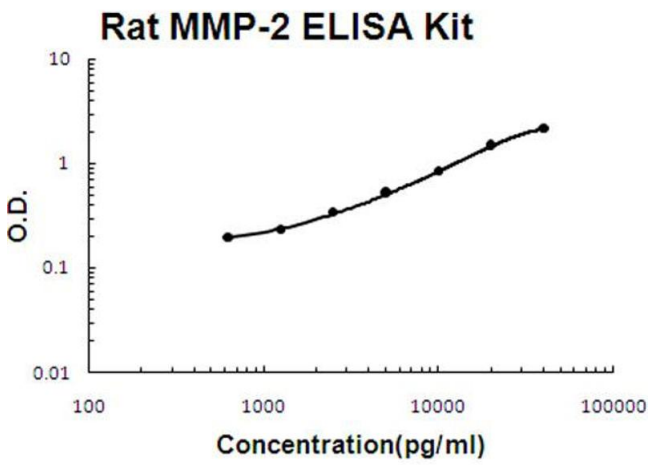
| Storage: | 4 °C,-20 °C |
| Storage Comment: | Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing. |
| Expiry Date: | 12 months |

## Images




**ELISA**

**Image 1.** Rat MMP-2 Accusignal ELISA Kit Rat MMP-2 AccuSignal ELISA Kit standard curve. Assay Range: 625pg/ml-40000pg/ml. Sensitivity: <10pg/ml.