

Datasheet for ABIN4987026

**MMP 9 ELISA Kit**[Go to Product page](#)**1** Image

## Overview

|                          |                 |
|--------------------------|-----------------|
| Quantity:                | 96 tests        |
| Target:                  | MMP 9 (MMP9)    |
| Reactivity:              | Human           |
| Method Type:             | Sandwich ELISA  |
| Detection Range:         | 62.5-4000 pg/mL |
| Minimum Detection Limit: | 62.5 pg/mL      |
| Application:             | ELISA           |

## Product Details

|                        |                                                                                                                                                           |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sample Type:           | Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate), Plasma (EDTA)                                                                        |
| Analytical Method:     | Quantitative                                                                                                                                              |
| Detection Method:      | Colorimetric                                                                                                                                              |
| Specificity:           | Natural and recombinant Human MMP-9 Ligand                                                                                                                |
| Sensitivity:           | 31 pg/mL                                                                                                                                                  |
| Material not included: | <ul style="list-style-type: none"><li>• Microplate reader.</li><li>• Pipettes and pipette tips.</li><li>• EP tube Deionized or distilled water.</li></ul> |

## Target Details

|         |              |
|---------|--------------|
| Target: | MMP 9 (MMP9) |
|---------|--------------|

## Target Details

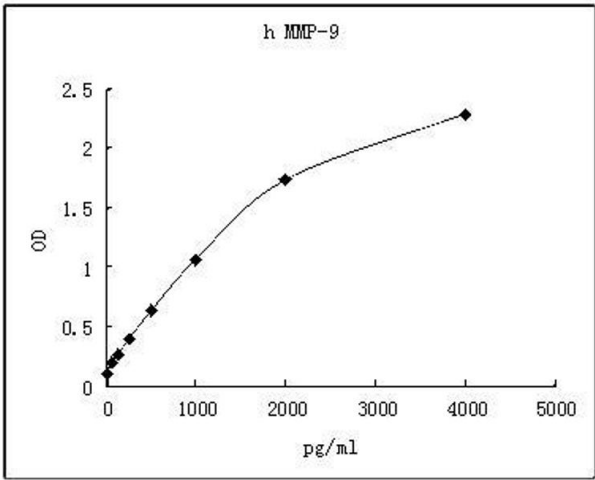
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative Name: | MMP-9 ( <a href="#">MMP9 Products</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Background:       | <p>Matrix metalloproteinases (MMPs) are a family of zinc-dependent endopeptidases that degrade extracellular matrix proteins (1 - 3). They are secreted as zymogens (Pro-MMPs) that are activated by a variety of proteinases or by reaction with organic mercurials. They are inhibited by specific tissue inhibitors of metalloproteinases (TIMPs) and by 2-macroglobulin (3 - 6). The regulation of MMP activity is important in tissue remodeling, inflammation, tumor growth and metastasis (3, 7 - 9). Human MMP-9 (also known as gelatinase B) is secreted as a 92 kDa zymogen (2, 3). Cleavage of Pro-MMP-9 at or near residue 87 results in the active enzyme with a mass of approximately 82 kDa (1). MMP-9 has three fibronectin type II domains, a hemopexin-like domain and a proline-rich type V collagen-homologous domain (1 - 3). Pro-MMP-9 can be activated by MMP-3 (5) or by certain bacterial proteinases (10). MMP-9 is inhibited by <math>\alpha</math>2-macroglobulin or by TIMP-1 (3 - 6), which binds to Pro-MMP-9 as well as to active MMP-9 (3). In vitro treatment of Pro-MMP-9 with 4-aminophenylmercuric acid (APMA) produces not only the 82 kDa active enzyme but also a C-terminal truncated form of approximately 65 kDa with the activity comparable to that of the 82 kDa form (11). Pro-MMP-9 is secreted by monocytes, macrophages, neutrophils, keratinocytes, fibroblasts, osteoclasts, chondrocytes, skeletal muscle satellite cells, endothelial cells, and various tumor cells (1, 7- 21). Pro-MMP-9 expression is upregulated by TGF-<math>\beta</math>1, IL-1<math>\beta</math>, TGF-<math>\alpha</math>, PDGF-AB, TNF-<math>\alpha</math>, and IL-1<math>\alpha</math> (7, 15, 17). Substrates for MMP-9 include denatured collagen type I (gelatin), native collagens type IV, V, VII, X and XI, fibrinogen, vitronectin, IL-1<math>\beta</math>, and entactin, a molecule that bridges laminin and type IV collagen (3, 4, 6, 13, 21 - 23).</p> |
| Pathways:         | <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Positive Regulation of Immune Effector Process</a> , <a href="#">CXCR4-mediated Signaling Events</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Application Details

|                    |                              |
|--------------------|------------------------------|
| Application Notes: | Detection Wavelength: 450 nm |
| Sample Volume:     | 20 $\mu$ L                   |
| Assay Time:        | 3 h                          |
| Plate:             | Pre-coated                   |
| Restrictions:      | For Research Use only        |

## Handling

|          |      |
|----------|------|
| Storage: | 4 °C |
|----------|------|



ELISA

Image 1.