# MMP-9 (catalytic domain) (human), (recombinant, E. coli)

Matrix metallopeptidase 9 (MMP-9) belongs to a class of enzymes that belong to the zinc-metalloproteinase family involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, angiogenesis, bone development, wound healing, cell migration, learning and memory. Its also associated with numerous pathological processes, including cancer, immunologic and cardiovascular diseases.

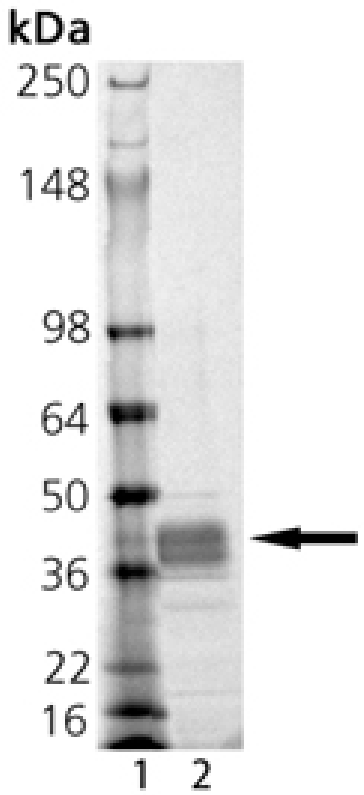
**Citations:** 12 View Online »

## Ordering Information Order Online »

| | |
|---|---|
| **BML-SE360-0010** | 10µg |

## Manuals, SDS & CofA View Online »

- Naturally-occurring active form of MMP-9
- High purity
- High activity




SDS-PAGE Analysis: Lane 1: MW Marker, Lane 2: 1µg MMP-9 (catalytic domain) (human), (recombinant, E. coli).

## Handling & Storage

| | |
|---|---|
| **Handling** | Avoid freeze/thaw cycles. After opening, prepare aliquots and store at -80°C. |
| **Long Term Storage** | -80°C |
| **Shipping** | Dry Ice |

## Regulatory Status

RUO - Research Use Only

## Product Details

| | |
|---|---|
| **Activity** | Yes |
| **Alternative Name** | Matrix metalloproteinase 9, Gelatinase B, 92 kDa Type IV collagenase |
| **Application Notes** | Useful tool to study enzyme kinetics, cleave target substrates, and screen for inhibitors. |
| **Formulation** | Liquid. In 50mM TRIS, pH 7.5, containing 1mM calcium chloride, 300mM sodium chloride, 5µM zinc chloride, 0.1% Brij-35 and 15% glycerol. |
| **MW** | 39 kDa |
| **Purity** | ≥95% (SDS-PAGE) |
| **Purity Detail** | Purified by multi-step chromatography. |
| **Source** | Produced in *E. coli*. Active recombinant matrix metalloproteinase-9 (MMP-9, gelatinase B, 92 kDa type IV collagenase) cloned from human cDNA. The enzyme consists of residues $Phe^{107}$-$Pro^{449}$ (NM_004994), which comprises the catalytic/fibronectin domain of human MMP-9, with a C-terminal purification tag. This represents a naturally-occurring active form of MMP-9 which lacks the C-terminal hemopexin domain. Activity toward its targets, such as gelatin, casein, or peptide substrates, is unaffected. |
| **Specific Activity** | ≥500 pmol/min/ug at 37°C using the colorimetric thiopeptolide Ac-Pro-Leu-Gly-S-Leu-Leu-Gly-OEt (100 µM; Prod. No. BML-P125) as substrate. |

**UniProt ID** P14780

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ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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