MMP-1 (catalytic domain) (human), (recombinant)

In an SDS-PAGE gel, the enzyme runs as a doublet (<20 kDa). The higher band represents the polypeptide described above, while spontaneous cleavage of the tag results in the lower band. Both species possess identical enzymatic activities.

Citations: 8 View Online »

Ordering Information

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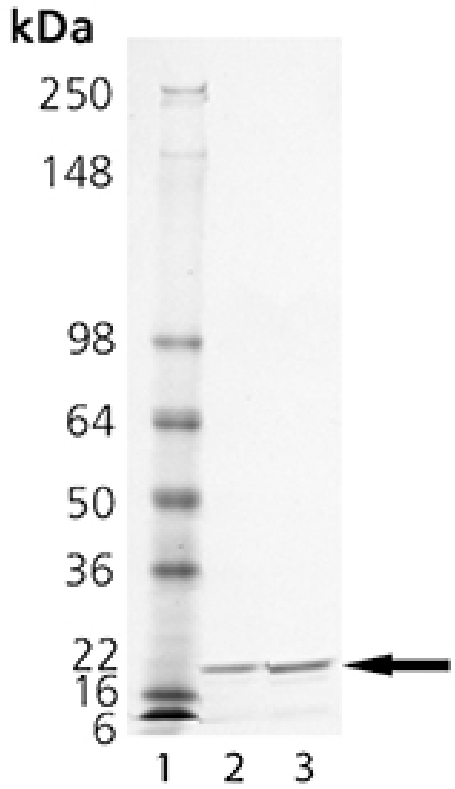
BML-SE180-0010	10µg

Manuals, SDS & CofA

View Online »



SDS-PAGE Analysis: Lane 1: MW Marker, Lane 2: 1 µg, Lane 3: 2 µg MMP-1.

Handling & Storage

Use/Stability	The enzyme is stable on ice for at least several hours. However, it is recommended that thawing and dilution of the enzyme be done within as short a time as possible before start of the assay. Note: When stored under the recommended conditions, this enzyme is stable at the concentration supplied, in its current storage buffer. Procedures such as dilution of the enzyme followed by refreezing could lead to loss of activity.
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	Preincubation of MMP-1 catalytic domain at 0.7 nM with the broad-spectrum inhibitor GM6001 (Prod. No. BML-EI300) at 20nM for 1 hour completely inhibits enzymatic activity.
Alternative Name	Matrix metalloproteinase 1, Interstitial collagenase, Fibroblast 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 5mM calcium chloride, 300mM sodium chloride, 20µM zinc chloride, 0.5% Brij-35, and 30% glycerol.
Gene/Protein Identifier	NM_002421 (RefSeq)
MW	~19.9 kDa
Purity	≥95% (SDS-PAGE)
Purity Detail	Purified by multi-step chromatography.

Source	Produced in *E. coli*. Active Matrix Metalloproteinase-1 (MMP-1, interstitial collagenase, fibroblast collagenase) catalytic domain from human cDNA. The enzyme consists of the catalytic domain of human MMP-1 (Phe^{100}-Gln^{268}) with a C-terminal purification tag.
Specific Activity	≥5000 pmol/min/µg 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	P03956

Last modified: May 29, 2024

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