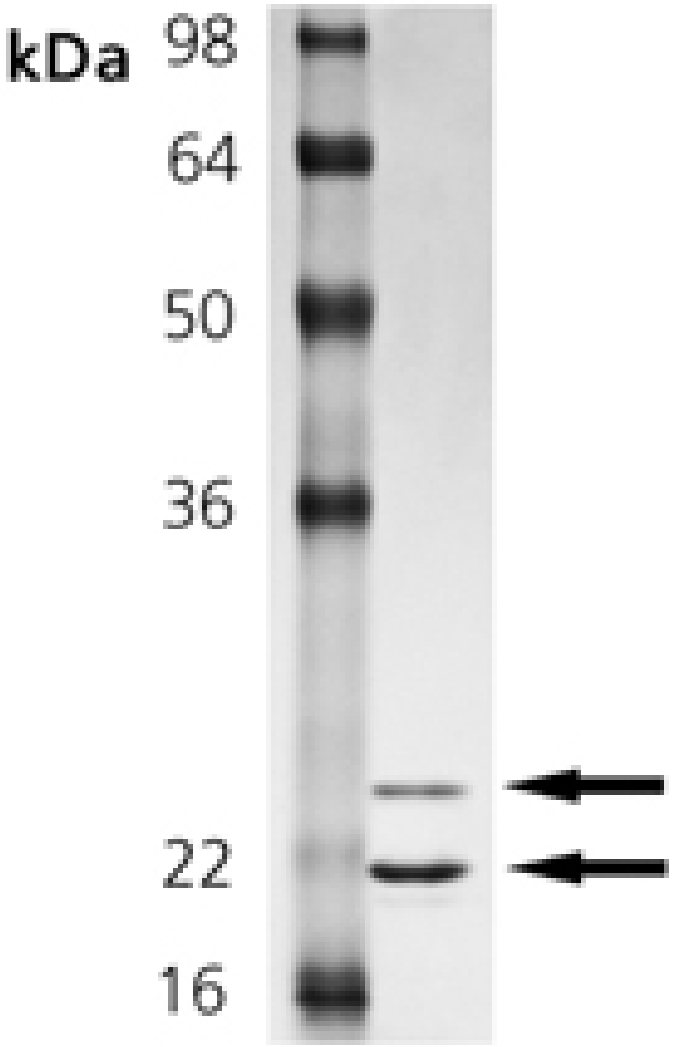
MMP-12 (catalytic domain) (human), (recombinant)

Citations: 5 View Online »

Ordering Information Order Online »

BML-SE138-0010	10µg

Manuals, SDS & CofA View Online »



SDS-PAGE Analysis: Lane1, MWM; Lane 2, 1.0 µg of purified human MMP-12 protein. In the SDS-PAGE gel, the enzyme runs as a doublet (~20kDa). 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.

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. When stored per recommendation, 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-12 catalytic domain at 4nM with the inhibitor NNGH (Prod. No. BML-PI115) at 20nM, or with the broad-spectrum inhibitor GM6001 (Prod. No. BML-EI300) at 5nM, for 1 hour completely inhibits enzymatic activity.
Alternative Name	Matrix metalloproteinase 12, Metalloelastase, Macrophage elastase
Application Notes	Useful tool to study enzyme kinetics, cleave target substrates, and screen for inhibitors.
Formulation	Liquid. In 50mM TRIS, pH 9.5, containing 5mM calcium chloride, 500mM sodium chloride, 20µM zinc chloride, 0.5% Brij-35, and 30% glycerol.
MW	20.3 kDa
Purity	≥95% (SDS-PAGE)
Purity Detail	Purified by multi-step chromatography.

Source

Produced in *E. coli*. Active Matrix Metalloproteinase-12 (MMP-12, metalloelastase, macrophage elastase; often confused with neutrophil elastase) catalytic domain from human cDNA. The enzyme consists of the catalytic domain of human MMP-12 (Phe^{99}-Leu^{271}, NM_002426) with a C-terminal purification tag.

Specific Activity

≥2000 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.

Technical Info / Product Notes

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.

UniProt ID

P39900

Last modified: May 29, 2024

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