MMP-14 (catalytic domain) (human), (recombinant)

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BML-SE259-0010	10µg

Manuals, SDS & CofA View Online »

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 at -70°C, 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	After opening, prepare aliquots and store at -70°C. Avoid freeze/thaw cycles.
Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Activity	Preincubation of MMP-14 catalytic domain at 13.6nM with the broad-spectrum inhibitor GM6001 (Prod. No. BML-EI300) at 20nM for 1 hour completely inhibits enzymatic activity.
Alternative Name	Matrix metalloproteinase 14, Membrane type matrix metalloproteinase 1, MT-1 MMP
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.
MW	22.5 kDa
Purity Detail	Partially purified by single-step affinity chromatography and gel filtration.

Source	Produced in *E.coli*. Active Matrix Metalloproteinase-14 (MMP-14, Membrane-Type Matrix Metalloproteinase 1, MT1-MMP) catalytic domain from human cDNA. The enzyme consists of the catalytic domain of human MMP-14 (Tyr^{112}-Arg^{298}, NM_004995) with a C-terminal purification tag. This represents a naturally-occurring active form of MMP-14 which lacks the C-terminal hemopexin domain. MMPs lacking this domain cannot cleave native collagens; however, activity toward other targets such as gelatin, casein, or peptide substrates is unaffected.
Specific Activity	≥1000 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	P50281

Last modified: June 16, 2025

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