MMP-2 (catalytic domain) (human), (recombinant)

Represents a naturally occurring active form of MMP-2 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.

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BML-SE237-0010	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. After initial defrost, aliquot product into individual tubes and refreeze at -70°C. Avoid repeated freeze/defrost cycles.NOTE: When stored under the above 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.
Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Activity	Preincubation of MMP-2 catalytic domain at 5nM with the broad-spectrum inhibitor GM6001 (Prod. No. BML-EI300) at 30nM for 1 hour completely inhibits enzymatic activity.
Alternative Name	Matrix metalloproteinase 2, Gelatinase A, 72 kDa Type IV collagenase
Application Notes	Useful tool to study enzyme kinetics, cleave target substrates, and screen for inhibitors.
Formulation	Liquid. In 50mM TRIS-HCl, pH 7.5, containing 300mM NaCl, 5mM $CaCl_2$, 20µM $ZnCl_2$, 0.05% Brij-35 and 20% glycerol.
Gene/Protein Identifier	NM_004530 (RefSeq)
MW	~40kDa
Purity	≥90% (SDS-PAGE)
Purity Detail	Purified by multi-step chromatography.

Source	Produced in yeast. Active recombinant matrix metalloproteinase-2 (MMP-2, gelatinase A, 72kDa type IV collagenase) cloned from human cDNA. The enzyme consists of residues Tyr^{110}-Asp^{452}, which comprises the catalytic/fibronectin domain of human MMP-2, with a C-terminal purification tag.
Specific Activity	≥200 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	P08253

Last modified: May 29, 2024

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