

Matrix metalloproteinase (MMP) multipack-1

The MMP multipack-1 contains 10µg each of five highly active recombinant MMP catalytic domains: MMP-1, MMP-2, MMP-8, MMP-9, and MMP-13.

The matrix metalloproteinases, or MMPs, are extracellular proteases that function at a neutral pH to cleave a wide variety of substrates. These include basement membrane and extracellular matrix components, growth and death factors, cytokines, and cell and matrix adhesion molecules. The broad range of substrate specificities and expression patterns of MMPs results in their involvement in many different processes, both normal and pathological. Aberrant expression has been noted in cancer, angiogenesis, arthritis, inflammation, periodontal disease, emphysema, multiple sclerosis, pre-eclampsia, and chronic wounds, among others. The general structure of an MMP protein consists of a pre domain to direct secretion from the cell, a pro domain, a catalytic domain, and a C-terminal hemopexin domain. The catalytic site involves a coordinately-bound zinc ion. The inactive, or zymogen, form of the enzyme is activated by disruption of one of the coordinate bonds, usually via proteolytic removal of the pro domain.

Citations: 4

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Ordering Information

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BML-AK013-0001	1Kit
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Manuals, SDS & CofA

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Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Handling Avoid freeze/thaw cycles.

Long Term Storage -80°C

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Application FUNC, HTS

Application Notes Enzyme regulation and kinetics, comparative studies of substrate or inhibitor specificities, cleavage of target proteins. Assay or digest conditions can vary widely, but concentrations for the MMP enzymes can range between 10 and 300nM, or higher. Reaction temperatures can be between 25 and 37°C, and reaction times can range from 10 min to overnight, again depending on application and substrate. A typical assay buffer is 50mM HEPES, pH 7.0, 10mM CaCl₂, 0.05% Brij-35. For more information, contact Enzo Life Sciences Technical Support.

Contents Contains 10µg of each enzyme, provided in a screw-cap microfuge tube.

MMP-1 (catalytic domain) (human), (recombinant) (Prod. No. [BML-SE180](#)),

MMP-2 (catalytic domain) (human), (recombinant) (Prod. No. [BML-SE237](#)),

MMP-8 (catalytic domain) (human), (recombinant) (Prod. No. [BML-SE255](#)),

MMP-9 (catalytic domain) (human), (recombinant) (Prod. No. [BML-SE360](#)),

MMP-13 (catalytic domain) (human), (recombinant) (Prod. No. [BML-SE246](#)).

Formulation

For MMP-1, MMP-2, MMP-8, and MMP-13:

Liquid. 0.1µg/µl in 50mM TRIS, pH 7.5, containing 5mM CaCl₂, 300mM NaCl, 20µM ZnCl₂, 30% glycerol, 0.5% Brij-35.

For MMP-9:

Liquid. In 50mM TRIS, pH 7.5, containing 1mM CaCl₂, 300mM NaCl, 5µM ZnCl₂, 0.1% Brij-35 and 15% glycerol.

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