Matrix metalloproteinase-12 (MMP-12) fluorometric drug discovery kit, GREEN

The MMP-12 Fluorometric (also known as fluorimetric) Drug Discovery Kit, GREEN is a complete assay system designed to screen MMP-12 inhibitors using a quenched fluorogenic OMNIMMP® Green substrate: 5-FAM-Arg-Pro-Lys-Pro-Val-Glu-Nva-Trp-Arg-Lys(TQ2W)-NH_2 [5-FAM = 5-carboxyfluorescein; Nva=norvaline; TQ2W=quencher]. FAM fluorescence is thoroughly quenched by the TQ2W group until cleavage by MMPs separates the two moieties.

The assays are performed in a convenient 96-well microplate format. The kit is useful to screen inhibitors of MMP-12, a potential therapeutic target. The compound NNGH is also included as a prototypic control inhibitor.

Matrix metalloproteinase-12 (MMP-12, metalloelastase, macrophage elastase, commonly confused with neutrophil elastase) is a member of the MMP family of extracellular proteases. These enzymes play a role in many normal and disease states by virtue of their broad substrate specificities. Targets of MMP-12 include elastin, fibronectin, laminin, plasminogen, u-PAR, and tissue factor pathway inhibitor. MMP-12 is secreted as a 53kDa proenzyme (as measured by SDS-PAGE), and activated by cleavage to forms of 45-22kDa. MMP-12 is an important target for inhibitor screening due to its involvement in diseases such as cancer, allergy and emphysema.

Ordering Information

Order Online »

BML-AK312-0001	96 wells

Manuals, SDS & CofA

View Online »

Handling & Storage

Handling	Avoid freeze/thaw cycles.
Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Metalloelastase, Macrophage elastase
Application	Activity assay, Fluorescent detection, HTS
Application Notes	Designed to screen MMP-12 inhibitors using a quenched fluorogenic substrate.
Contents	1 vial MMP-12 enzyme 1 vial substrate (MMP-3 fluorogenic substrate) 1 vial 5-FAM calibration standard 1 vial control inhibitor (NNGH) 1 bottle (20 ml) assay buffer 1 black 96-well microplate Instructions
Technical Info / Product Notes	**NCBI Reference Sequence:** NM_004994 The green fluorogenic MMP substrate provided in the kit offers key advantages over other MMP substrates. 1) Emission in the green region of the spectrum avoids the interference at lower wavelengths often exhibited by screening compounds, and by substances commonly found in biological samples and tissue culture medium. 2) The ultra-strong fluorescence of this substrate allows for substrate concentrations much lower than the K_m, a condition generally desirable in inhibitor screening/kinetics assays.
UniProt ID	P39900

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

For local distributors and detailed product information visit us online: enzo.com All product names, logos, and brands are the property of their respective owners.