MMP-9 Inhibitor Screening Kit

Product Information

Cat.No.

Kit-2130

Product Overview

MMP-9 Inhibitor Screening Kit provides a quick and sensitive way for screening, studying and characterizing potential inhibitors of MMP-9. In this assay, MMP-9 hydrolyzes a FRET-based MMP-9 substrate and releases the quenched fluorescent group Mca, which can be detected fluorometrically at Ex/Em=325/393 nm.

Size

100 assays

Description

Matrix metalloproteinase (MMP) family proteins are involved in the breakdown of extracellular matrix, and have been recognized as potential targets for a variety of pathologies. Matrix metallopeptidase 9 (MMP-9), also known as 92 kDa type IV collagenase, 92 kDa gelatinase or gelatinase B, is the mostly studied MMP, due to its fundamental roles in cancer biology, autoimmune disease, and other conditions. MMP-9 is a metalloenzyme, composed of a pro-domain, a gelatin binding domain, a catalytic domain, a proline rich linker region, and a carboxyl terminal hemopexin like domain. This enzyme degrades various substrates including gelatin, collagen types IV / V, and elastin.

Applications

Screening/studying/characterizing potential MMP-9 inhibitors

Storage

Store the kit at -20°C, protected from light. Briefly centrifuge small vials prior to opening. Read the entire protocol before performing the assay.MMP-9 Assay Buffer and MMP-9 Substrate: Bring to room temperature before use.MMP-9: Reconstitute with 110 µl pre-chilled 30% Glycerol solution (in dH2O). Keep on ice until it completely dissolves. Store the reconstituted MMP-9 in aliquots at -20°C. Prevent repeated freeze thaw cycles.Inhibitor NNGH (2 mM): Aliquot and store at -20°C.

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Kit Components

MMP-9 Assay Buffer: 25 mlMMP-9 Substrate (4 mM): 100 µlMMP-9 (lyophilized): 1 vialInhibitor (NNGH 2 mM): 50 µl

Detection method   Fluorescence (Ex/Em = 325/393 nm)

Compatible Sample Types

Chemical libraries, small molecules

Features & Benefits

• Simple, fast assay.• Fluorometric detection.