# MMP-14 Inhibitor Screening Kit (Fluorometric)

**Cat. No.** Kit-2320 **Lot. No.** (See product label)

## SPECIFICATION

| | |
|---|---|
| **Product Overview** | The Matrix metalloproteinase-14 (MMP-14) (MT1-MMP) belongs to a family of zinc-dependent endopeptidases that are responsible for the degradation of the extracellular matrix (ECM) proteins including collagens, elastins, gelatin, matrix glycoproteins and proteoglycans, during normal development and disease processes. MMPs can be classified into at least four different families of closely related members - collagenases, gelatinases, stromelysins, and membrane-type MMPs (MT-MMPs). MMP-14 belongs to the family of MT-MMPs and is localized on cell surfaces via its transmembrane domain. MMP-14 is expressed in adult lung, placenta, kidney, ovaries, intestine, prostate and spleen along with certain carcinomas. The ability of MMP-14 to degrade type I collagen, and activate pro-MMP-2 and pro-MMP-9 makes it a key enzyme in many physiological and pathological processes such as angiogenesis and tumor invasion. MMP-14 Inhibitor Screening Kit provides a simple, fast and high-throughput adaptable method to screen/study/characterize potential MMP-14 inhibitors. The assay utilizes the ability of MMP-14 to cleave a synthetic MCA-based peptide substrate to release free MCA (7-Methoxycoumarin-4-acetic acid), which can be easily quantified using a fluorometer or fluorescence microplate reader at Ex/Em = 325/420 nm. In the presence of a MMP-14 specific inhibitor, the cleavage of the substrate is reduced/abolished, resulting in decrease or total loss of the MCA fluorescence. |
| **Applications** | Screening/studying/characterizing potential MMP-14 inhibitors |
| **Storage** | -20°C |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|---|---|
| **Shipping** | Gel Pack |
| **Size** | 100 assays |
| **Kit Components** | MMP-14 Assay Buffer; MMP-14 Substrate (4 mM); MMP-14 Enzyme; MMP-14 Inhibitor (NNGH, 2 mM) |
| **Detection method** | Fluorescence (Ex/Em = 325/420 nm) |
| **Features & Benefits** | Fluorometric detection. |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA