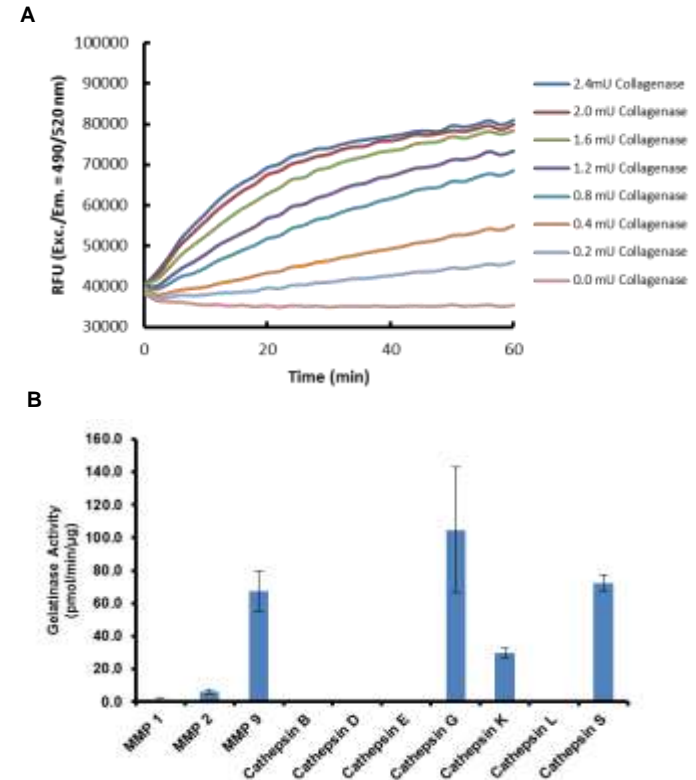


Gelatin, Fluorescein (FITC) Conjugate

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| CATALOG NO: | M1303-1 M1303-5 | 1mg (5 X 1mg) |
| ALTERNATE NAMES: | Gelatin-FITC, Collagenase/Gelatinase fluorogenic substrate | |
| SOURCE: | Bovine skin (Type B) | |
| FORM: | Lyophilized | |
| FORMULATION: | Freeze-dried from 5 mg/ml solution in TBS | |
| RECONSTITUTION: | Reconstitute with 0.2 ml of deionized water to get 5 mg/ml solution of Gelatin-FITC. If necessary, vortex the solution to dissolve the lyophilized pellet. It may be further diluted to 0.1 mg/ml in TBS before use. | |
| STORAGE CONDITIONS: | Store at -20°C. Stable for at least one year as supplied. | |
| DESCRIPTION: | Collagen is a major component of the extracellular matrix in vertebrates and it constitutes approximately 25% of total protein. It plays an important role in cell adhesion and migration. Specific collagen receptors, fibronectin and a number of other proteins involved in cell-cell and cell-surface adhesion have been demonstrated to bind collagen and gelatin (denatured collagen). BioVision's Gelatin-FITC is labeled with a fluorophore, fluorescein Isothiocyanate (FITC) and the conjugate is a highly quenched substrate for gelatinases/collagenases. It can be digested by gelatinases, collagenases and other matrix degrading metalloproteases, releasing brightly fluorescent peptides (Ex/Em 490/520 nm). The increase in fluorescence upon digestion is proportional to the proteolytic activity of the enzyme under investigation. BioVision's Gelatin-FITC can also be used to detect gelatin binding proteins and live cell staining. | |
| ACTIVITY: | BioVision's Gelatin-FITC has been tested as a substrate for a variety of Collagenases/Gelatinases and Cathepsins (see Figure). For each enzyme, we recommend titrating different amounts of Gelatin-FITC to find the optimum amount necessary per assay for the proteolytic cleavage. | |
| APPLICATIONS: | BioVision's Gelatin-FITC can be used as a substrate for detection of Gelatinases/Collagenase and other gelatin degrading enzymes, to study gelatin binding proteins and live cell staining. | |

FOR RESEARCH USE ONLY! Not to be used on humans.



Testing of BioVision's Gelatin-FITC conjugate: Assays were performed using a black plate at 37 °C in kinetic mode

Figure A: Gelatin-FITC conjugate were tested as a substrate in the absence and presence of different amounts of a microbial Collagenase from *Clostridium histolyticum*.

Figure B: Gelatin-FITC conjugate were tested against a variety of Collagenases, Gelatinases (MMP2 and MMP9) and other matrix degrading enzymes including Cathepsins.

RELATED PRODUCTS:

- MMP-9, Active, human recombinant (Cat. No. 7867)
- Self-Quenched BODIPY Gelatin (Cat. No. 7935)
- MMP-2, human recombinant (Cat. No. 7782)
- Human CellExp™ MMP-1, human recombinant (Cat. No. 7244)
- Human CellExp™ MMP-2, human recombinant (Cat. No. 7245)
- Human CellExp™ MMP-9, human recombinant (Cat. No. 7246)