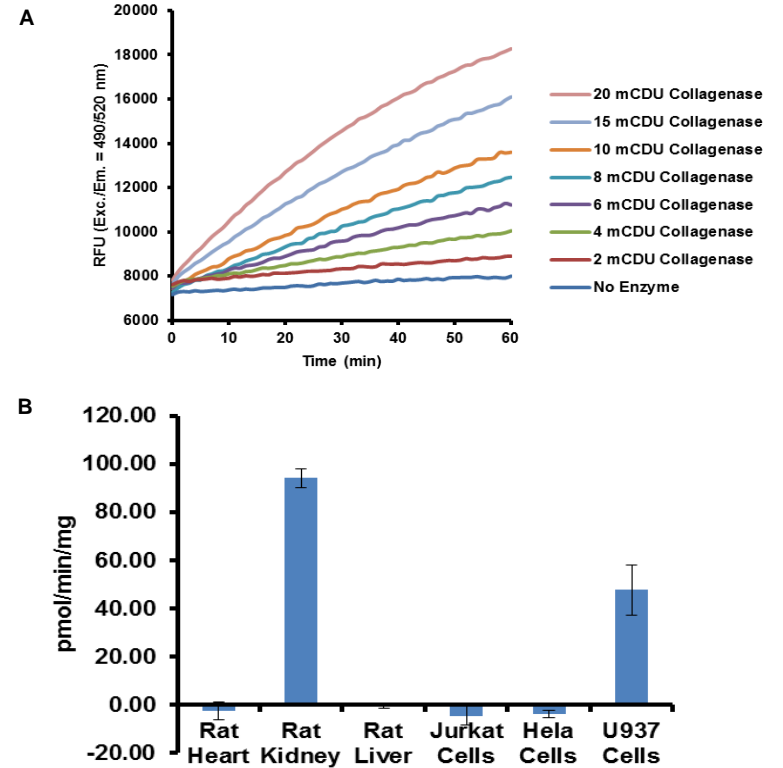


Collagen-Fluorescein (FITC) Conjugate

CATALOG NO:	M1304-1 M1304-5	1 mg (5 X 1 mg)
ALTERNATE NAMES:	Collagen-FITC, Collagenase/Gelatinase fluorogenic substrate	
SOURCE:	<i>Bovine Tendon Type 1</i>	
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 Collagen-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 Collagen-FITC is heavily modified collagen with a fluorophore (fluorescein Isothiocyanate, FITC). 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 Collagen-FITC can also be used to detect collagen binding proteins and in live cell staining.	
ACTIVITY:	BioVision's Collagen-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 Collagen-FITC to find the optimum amount necessary per assay for the proteolytic cleavage.	
APPLICATIONS:	BioVision's Collagen-FITC can be used as a substrate for detection of Gelatinases/Collagenase and other collagen degrading enzymes, to study collagen binding proteins and live cell staining.	

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



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

Figure A: BioVision's Collagen-FITC was tested as a substrate in the absence and presence of different amounts of a microbial Collagenase from *Clostridium histolyticum*

Figure B: Collagen-FITC was also tested against a variety of Collagenases, Gelatinases (MMP2 and MMP9) and other matrix degrading enzymes including Cathepsins

RELATED PRODUCTS:

- Gelatin, Fluorescein (FITC) Conjugate (Cat. No. M1303)
- 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)