

# Protease Activity Fluorometric Assay Kit

Cat. No. Kit-0720 Lot. No. (See product label)

## SPECIFICATION

**Product Overview**

- Simple procedure; takes ~60 minutes
- Fast and convenient
- Sensitive assay for measuring protease activity in a number of sample types

**Description**

Proteases are naturally present in all organisms. These enzymes are involved in a multitude of physiological reactions from simple digestion of food proteins to highly regulated cascades. Proteases can either break specific peptide bonds (limited proteolysis), depending on the amino acid sequence of a protein, or break down a complete peptide to amino acids (unlimited proteolysis). The activity can be a destructive change (abolishing a protein's function), an activation of a function (preform to mature form) or it can be a signal in a signaling pathway. Protease Activity Assay Kit is designed for the quantitative determination of proteases present in the protein sample. The assay uses fluorescein isothiocyanate (FITC)-labeled casein as a general protease substrate. The fluorescein label on the FITC-Casein is highly quenched. Upon digestion by proteases present in the sample the FITC-Casein substrate is cleaved into smaller peptides which abolishes the quenching of the fluorescence label. The fluorescence of the FITC-labeled peptide fragments is measured at Ex/Em = 485/530 nm. The kit is supplied with our Mass Spectrometry Grade (MSG), chemically stabilized Trypsin for use as a general protease control. However, other protease standard controls can also be used. This kit is easy to use and can detect < 500 pg/well Trypsin present in the sample

**Applications**

This kit can detect < 500 pg/well Trypsin present in the sample

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<b>Usage</b>	For Research Use Only! Not For Use in Humans
<b>Storage</b>	-20°C
<b>Size</b>	100 assays
<b>Kit Components</b>	<ul style="list-style-type: none"><li>• Assay Buffer</li><li>• Substrate (lyophilized)</li><li>• FITC Standard (25 µM)</li><li>• Positive Control (lyophilized)</li></ul>
<b>Detection method</b>	Fluorescence (Ex/Em 485/530 nm)
<b>Compatible Sample Types</b>	Cell and Tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, food samples, etc.

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