Abcam's 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.

Visit our FAQs page for tips and troubleshooting.

Notes
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.

Platform
Microplate reader

Storage instructions
Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>Identifier</th>
<th>100 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC Standard (25 µM)</td>
<td>Yellow cap</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>Positive Control (lyophilized)</td>
<td>Green cap</td>
<td>1 vial</td>
</tr>
</tbody>
</table>
**Components**

<table>
<thead>
<tr>
<th>Components</th>
<th>Identifier</th>
<th>100 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protease Assay Buffer</td>
<td>WM</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>Protease Substrate (lyophilized)</td>
<td>Red cap</td>
<td>1 vial</td>
</tr>
</tbody>
</table>

**Images**

Positive control assayed using ab111750

Example Standard curve obtained using ab111750

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"**

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