

## Product datasheet

# Granzyme B Activity Assay Kit (Fluorometric) ab157403

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### Overview

<b>Product name</b>	Granzyme B Activity Assay Kit (Fluorometric)
<b>Detection method</b>	Fluorescent
<b>Sample type</b>	Cell Lysate
<b>Assay type</b>	Enzyme activity (quantitative)
<b>Species reactivity</b>	<b>Reacts with:</b> Mammals, Other species
<b>Product overview</b>	In Abcam's Granzyme B Activity Assay Kit (Fluorometric), active human Granzyme B enzyme hydrolyzes the specific substrate to release the quench of fluorescent group, which can be detected fluorometrically at Ex/Em = 380/500 nm. This Assay Kit is rapid, reliable and sensitive and can detect Granzyme B activity in various biological samples.

**Notes**

Granzyme B (GZMB, EC number 3.4.21.79) also known as Granzyme-2 is a serine protease stored in the granules of activated cytotoxic T cells and NK cells. Upon target cell contact, Granzyme B is directionally exocytosed and with the assistance of perforin enters the target cell. With its unique substrate specificity (Granzyme B prefers an aspartic acid residue at the P1 site of its substrates), Granzyme B processes and activates various pro-caspases thereby inducing apoptosis in the target cell.

**Platform** Microplate reader

### Properties

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

Components	Identifier	100 tests
AFC Standard	Yellow	1 x 0.1ml
Granzyme B Assay Buffer	WM	1 x 25ml
Granzyme B Positive Control	Green	1 vial
Granzyme B Substrate	Red	1 x 0.5ml

**Function** This enzyme is necessary for target cell lysis in cell-mediated immune responses. It cleaves after

Asp. Seems to be linked to an activation cascade of caspases (aspartate-specific cysteine proteases) responsible for apoptosis execution. Cleaves caspase-3, -7, -9 and 10 to give rise to active enzymes mediating apoptosis.

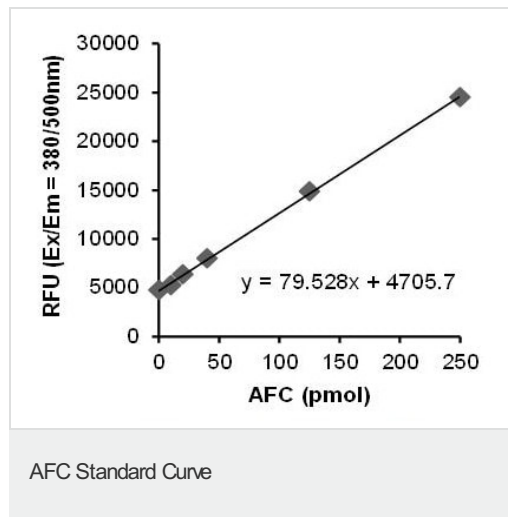
#### Sequence similarities

Belongs to the peptidase S1 family. Granzyme subfamily.  
Contains 1 peptidase S1 domain.

#### Cellular localization

Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells.

## Images



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