# abcam

# Product datasheet

# Granzyme B Inhibitor Screening Assay Kit ab157405

# 1 Image

Overview

Product name Granzyme B Inhibitor Screening Assay Kit

Detection method Fluorescent
Assay type Quantitative

Product overview In Abcam's Granzyme B Inhibitor Screening Assay Kit, 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. In the presence of potent Granzyme B Inhibitor, the hydrolyzation of substrate will be impeded. The Kit provides a rapid, simple, sensitive and reliable test suitable for high throughput screening of Granzyme B inhibitors or characterize/study Granzyme B inhibitors. Inhibitor control, Ac-IEPD-CHO is included to compare the efficacy of test

inhibitors.

Notes This product is manufactured by BioVision, an Abcam company and was previously called K169

Granzyme B Inhibitor Screening Kit (Fluorometric). K169-100 is the same size as the 100 test

size of ab157405.

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.

The standard is affinity purified.

**Platform** Microplate reader

#### **Properties**

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

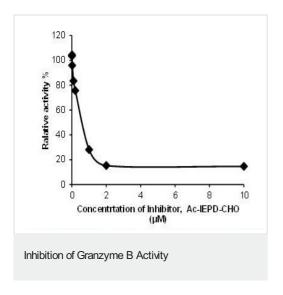
Components	100 tests
Granzyme B Assay Buffer	1 x 25ml
Granzyme B Enzyme	1 vial
Granzyme B Substrate	1 x 0.5ml

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Components	100 tests
Inhibitor Control (Ac-IEPD-CHO)	1 x 20µl

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**



Inhibition of Granzyme B Activity by Granzyme B Inhibitor, Ac-IEPD-CHO. Assay was performed following Kit protocol.

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