

Product datasheet

Mouse Granzyme B ELISA Kit ab238265

Recombinant SimpleStep ELISA[®]

[4 Images](#)

Overview

Product name Mouse Granzyme B ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Mouse spleen	5			3.9%

Inter-assay

Sample	n	Mean	SD	CV%
Mouse spleen	3			6.1%

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity 24.4 pg/ml

Range 188 pg/ml - 12000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	98	94% - 101%
Serum	94	89% - 103%
Cell culture media	109	103% - 120%
Cit plasma	90	85% - 96%

Assay time 1h 30m

Assay duration One step assay

Species reactivity**Reacts with:** Mouse**Product overview**

Mouse Granzyme B ELISA Kit ([ab238265](#)) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Granzyme B protein in cell culture supernatant, plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Granzyme B with 24.4 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties**Storage instructions**

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse Granzyme B Capture Antibody	1 x 600µl
10X Mouse Granzyme B Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
Antibody Diluent CPR	1 x 6ml
Mouse Granzyme B Lyophilized recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

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.

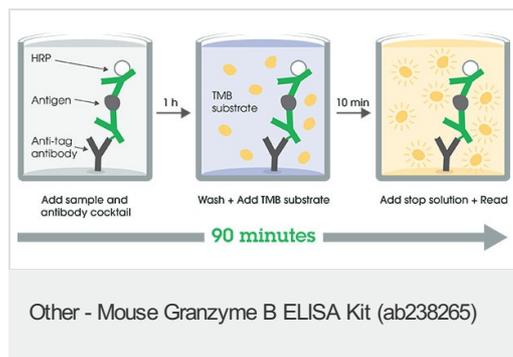
Sequence similarities

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

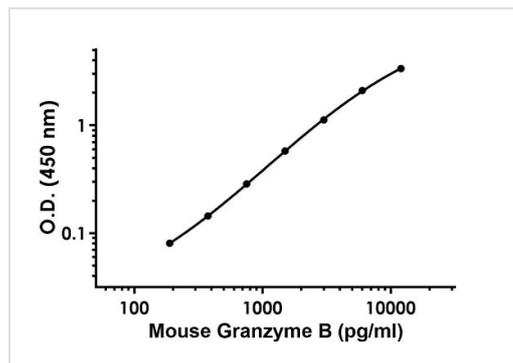
Cellular localization

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

Images

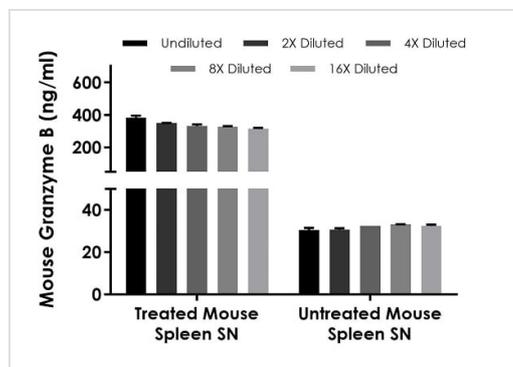


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse Granzyme B standard curve in Sample Diluent NS + Enhancer.



The concentrations of Granzyme B were measured in duplicates, interpolated from the Granzyme B standard curves and corrected for sample dilution. Undiluted samples are as follows: treated mouse spleen supernatant 1: 67 and untreated mouse spleen supernatant 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Granzyme B concentration was determined to be 340.6 ng/mL in treated mouse spleen supernatant and 31.7 ng/ml in untreated mouse spleen supernatant.

Interpolated concentrations of native Granzyme B in mouse treated and untreated spleen supernatant samples.

Powered by
recombinant antibodies



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Mouse Granzyme B ELISA Kit
(ab238265)

To learn more about the advantages of recombinant antibodies see [here](#).

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors