# ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

#### Catalog Number 710448

Pub. No. MAN0007780 Rev. 1.00

| Clonality: Oligoclonal    | <b>Quantity</b> : 100 µg | <b>Volume</b> : 200 µL     | Concentration: 0.5 mg/mL               |  |
|---------------------------|--------------------------|----------------------------|--|--|
| Host/Class: Rabbit IgG    | Reactivity: Human        | Predicted Reactivity: Huma | Predicted Reactivity: Human Granzyme B |  |
| Due des et de consistie a |                          |                            |  |  |

#### Product description

Granzyme B is a serine protease contained within cytoplasmic granules produced by cytotoxic T lymphocytes and natural killer cells. Granzyme B enters target cells to cleave caspase-3 and initiate the caspase cascade leading to DNA fragmentation and apoptosis. It can also act through a mitochondrial apoptosis pathway by cleaving the Bid protein. Granzyme B has also been shown to play an important role in activation induced cell death of T helper 2 cells.

# **Product specifications**

| Immunogen:             | Peptide corresponding to amino acids 26–<br>38 of human Granzyme B |  |  |
|------------------------|--|--|--|
| Alternate Names:       | CGL1, CSPB, CTLA1, GRB   |  |  |
| Apparent MW:           | ~32 kDa  |  |  |
| Gene ID:               | 3002   |  |  |
| Protein Accession No.: | P10144   |  |  |
| Sequence Identity:     | Human  |  |  |
| Isotype:               | lgG  |  |  |
| Lot:                   | See product label  |  |  |

# **Product applications**

| Application      | Species | Test Material | Concentration                         |
|------------------|---------|---------------|---------------------------------------|
| Western blotting | Human   | Jurkat cells  | 2–3 µg/mL                             |
| Indirect ELISA   | Human   | Peptide       | 1.5 × 10 <sup>-4</sup> to<br>3 μg/mL  |
| Flow cytometry   | Human   | Jurkat cells  | 1 μg for 1 × 10 <sup>6</sup><br>cells |

# Storage and handling

Store the antibody at 2°C to 8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

# Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

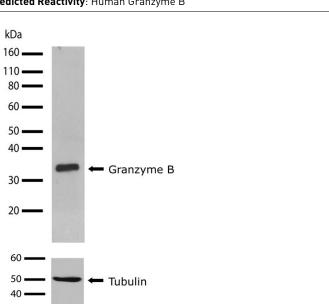
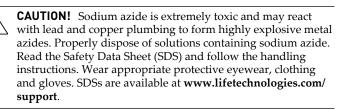


Figure 1 Western blot analysis of ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710448).

Western blot analysis was performed on whole cell extracts from Jurkat. Endogenous level of Granzyme B was detected at ~32 kDa using ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody at a concentration of 2 µg/mL, followed by Goat Anti-Rabbit HRP (Cat. no. 621234) as a secondary antibody. Tubulin was used as a loading control and detected with an antitubulin antibody [Sigma Cat. no. T9026]. The blot was developed using enhanced chemiluminescence (ECL) method.

# Storage buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



### **Product documentation**

To obtain a Certificate of Analysis or Safety Data Sheet (SDS), visit http://www.lifetechnologies.com/support.

### Limited product warranty

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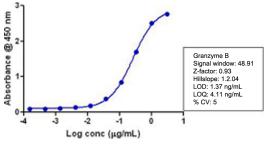


Figure 2 Indirect ELISA of ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710448).

Indirect ELISA was performed to detect various dilutions of ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody, followed by Goat Anti-Rabbit HRP (Cat. no. G21234), to detect Granzyme B peptide coated onto the plate. A non-linear regression analysis was performed (4 PL), LOD, and LOQ for the antibody was determined.

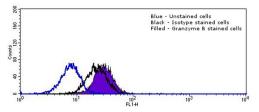


Figure 3 Flow cytometry analysis of Jurkat cells labelled with ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710448).

Fixed and permeabilized Jurkat cells were labelled with ABfinity<sup>™</sup> Granzyme B Recombinant Rabbit Oligoclonal Antibody, followed by Alexa Fluor<sup>®</sup> 488 goat anti-rabbit IgG staining (right peak, filled). To confirm specificity, the cells were labeled with an isotype control and stained using Alexa Fluor<sup>®</sup> 488 goat antirabbit IgG (middle peak, black), unstained cells (left peak, blue).

#### Explanation of symbols

| Symbol | Description                  | Symbol      | Description                             | Symbol | Description |
|--------|------------------------------|-------------|---|--------|-------------|
|        | Manufacturer                 | REF         | Catalog number                          | LOT    | Batch code  |
| $\Box$ | Use by                       |             | Temperature limitation                  |        |             |
| ĺ      | Consult instructions for use | $\triangle$ | Caution, consult accompanying documents |        |             |

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