

Granzyme B Monoclonal Antibody (NGZB), PE-Cyanine5.5, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine5.5, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	NGZB
Conjugate	PE-Cyanine5.5
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2848329

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1.0 µg/test	19 Publications

Product Specific Information

Description: This NGZB monoclonal antibody reacts with mouse Granzyme B, which is a member of the granzyme serine protease family. Granzyme B is found in the granules of cytotoxic T cells and NK cells. Granzyme B has also been described as CGL1 (cathepsin G-like-1), a serine protease expressed only in cytotoxic T-lymphocytes after cell activation, and CTLA-1 (cytotoxic T lymphocyte-associated serine esterase 1) based on identification of mRNA in various cytotoxic T cells, but not observed in non-cytotoxic lymphoid cells. Granzyme B is crucial for the rapid induction of target cell death by apoptosis, induced by interaction with cytotoxic T cells. The receptor involved has been identified as mannose 6-phosphate receptor. This receptor functions as a death receptor for Granzyme B during cytotoxic T cell-induced apoptosis. This NGZB monoclonal antibody does not crossreact to human Granzyme B nor is staining blocked with GB11, suggesting it recognizes a different epitope.

Applications Reported: This NGZB antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

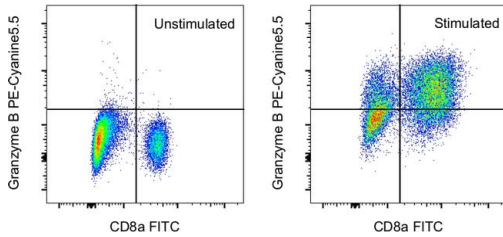
Applications Tested: This NGZB antibody has been tested by intracellular staining followed by flow cytometric analysis of mouse splenocytes using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Please refer to "Staining Intracellular Antigens for Flow Cytometry, Protocol A: Two step protocol for intracellular (cytoplasmic) proteins" located at Flow Protocols. This may be used at less than or equal to 1.0 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 695 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser

Product Images For Granzyme B Monoclonal Antibody (NGZB), PE-Cyanine5.5, eBioscience™



Granzyme B Antibody (35-8898-82) in Flow

C57BL/6 mouse splenocytes were unstimulated (left) or stimulated for 4 days with CD3e and CD28 Monoclonal Antibodies, Functional Grade (Product # 16-0031-85) and (Product # 16-0281-85) (right). Cells were then stained intracellularly, using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol, with CD8a Monoclonal Antibody, FITC (Product # 11-0081-82) and 0.5 μ g of Granzyme B Monoclonal Antibody, PE-Cyanine5.5. Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

19 References

Flow Cytometry (19)

Frontiers in immunology

CD4⁺ T Cell Fate Decisions Are Stochastic, Precede Cell Division, Depend on G1TR Co-Stimulation, and Are Associated With Uropodium Development.

"Published figure using Granzyme B monoclonal antibody (Product # 35-8898-82) in Flow Cytometry"

Authors: Cobbold SP, Adams E, Howie D, Waldmann H

Species
Not Applicable

Dilution
Not Cited

Year
2022

International journal of nanomedicine

Extracellular Vesicles from *Akkermansia muciniphila* Elicit Antitumor Immunity Against Prostate Cancer via Modulation of CD8⁺ T Cells and Macrophages.

"Published figure using Granzyme B monoclonal antibody (Product # 35-8898-82) in Flow Cytometry"

Authors: Luo ZW, Xia K, Liu YW, Liu JH, Rao SS, Hu XK, Chen CY, Xu R, Wang ZX, Xie H

Species
Not Applicable

Dilution
Not Cited

Year
2021

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More applications with references on thermofisher.com

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