

Granzyme B Monoclonal Antibody (NGZB), eFluor™ 450, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	NGZB
Conjugate	eFluor™ 450
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11149362

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	23 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 and flow cytometric analysis.

Applications Tested: This NGZB antibody has been tested by intracellular staining followed by flow cytometric analysis of stimulated mouse splenocytes using the Intracellular Fixation & Permeabilization Buffer Set (cat. 88-8824) and protocol. Please refer to Best Protocols: Protocol A: Two step protocol for (cytoplasmic) intracellular proteins. This can be used at less than or equal to 0.125 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

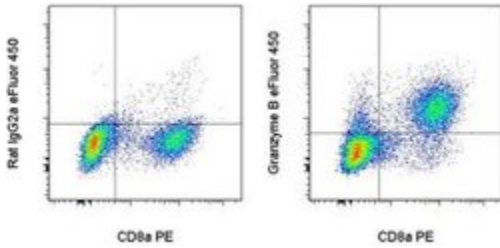
Carefully titrated for optimal performance in the assay of interest.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Granzyme B Monoclonal Antibody (NGZB), eFluor™ 450, eBioscience™



Granzyme B Antibody (48-8898-82) in Flow

Balb/c splenocytes were cultured with plate-bound Anti-Mouse CD3e Functional Grade Purified (Product # 16-0031-82) and Anti-Mouse CD28 Functional Grade Purified (Product # 16-0281-82) for 3 days, then cultured with Protein Transport Inhibitor Cocktail (Product # 00-4980-03) for an additional 5 hours. Cells were surface stained with Anti-Mouse CD8a PE (Product # 12-0081-82) followed by intracellular staining with 0.06 µg of Rat IgG2a K Isotype Control eFluor® 450 (Product # 48-4321-82) (left) or 0.06 µg of Anti-Mouse Granzyme B eFluor® 450 (right). Cells in the lymphocytes gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

24 References

Immunohistochemistry (1)

Journal of virology

Caribbean and La Réunion Chikungunya Virus Isolates Differ in Their Capacity To Induce Proinflammatory Th1 and NK Cell Responses and Acute Joint Pathology.

"Published figure using Granzyme B monoclonal antibody (Product # 48-8898-82) in Flow Cytometry"

Authors: Teo TH, Her Z, Tan JJ, Lum FM, Lee WW, Chan YH, Ong RY, Kam YW, Leparc-Goffart I, Gallian P, Rénia L, de Lamballerie X, Ng LF

Species
Not Applicable

Dilution
Not Cited

Year
2015

Flow Cytometry (23)

BioMed research international

Fluvastatin-Pretreated Donor Cells Attenuated Murine aGVHD by Balancing Effector T Cell Distribution and Function under the Regulation of KLF2.

"48-8898 was used in Flow cytometry/Cell sorting to conclude that administration of Fluvastatin to donor mice showed protective effects against recipient aGVHD when compared to untreated mice due to the retention of effector T cells in lymphoid organs accompanying with reduction of nonlymphatic infiltration and related inflammatory cytokines."

Authors: Zhao K, Tian Y, Wang J, Chen C, Pan B, Yan Z, Zhu S, Xu K

Species
Mouse

Dilution
Not Cited

Year
2021

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 # 48-8898-82) 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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