



### Granzyme B Monoclonal Antibody (NGZB), PE, 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), PE, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	NGZB
Conjugate	PE
Excitation/Emission Max	565/576 nm
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_10870787

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 μg/test	61 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.

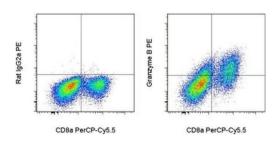
Applications Reported: This NGZB antibody has been reported for use in intracellular staining and flow cytometric analysis.

Applications Tested: This NGZB antibody has been tested by intracellular staining and flow cytometric analysis of 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  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

#### Product Images For Granzyme B Monoclonal Antibody (NGZB), PE, eBioscience™



#### Granzyme B Antibody (12-8898-82) 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 PerCP-Cy5-5 (Product # 45-0081-82) followed by intracellular staining with 0.06 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (left) or 0.06 µg of Anti-Mouse Granzyme B PE (right). Total viable cells were used for analysis.

#### View more figures on thermofisher.com

#### **□ 61 References**

#### Flow Cytometry (61)

Journal for immunotherapy of cancer

## BRCA1 deficiency in mature CD8<sup>+</sup> T lymphocytes impairs antitumor immunity.

"12-8898-82 was used in Flow cytometry/Cell sorting to report that mouse Brca1 knockout (KO) in mature T lymphocytes compromises host antitumor immune response to transplanted syngeneic mouse mammary tumors."

Authors: Wu B,Qi L,Chiang HC,Pan H,Zhang X,Greenbaum A,Stark E,Wang LJ,Chen Y,Haddad BR,Clagett D,Isaacs C, Elledge R,Horvath A,Hu Y,Li R

**Year** 2023

Species Mouse

#### **Cancer research communications**

# Small-molecule PTPN2 Inhibitors Sensitize Resistant Melanoma to Anti-PD-1 Immunotherapy.

"Published figure using Granzyme B monoclonal antibody (Product # 12-8898-82) in Flow Cytometry" Authors: Zhu Z,Tang R,Huff S,Kummetha IR,Wang L,Li N,Rana TM

Year 2023

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