Granzyme B Monoclonal Antibody (NGZB), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	NGZB
Conjugate	PE
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_10870787

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	26 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.

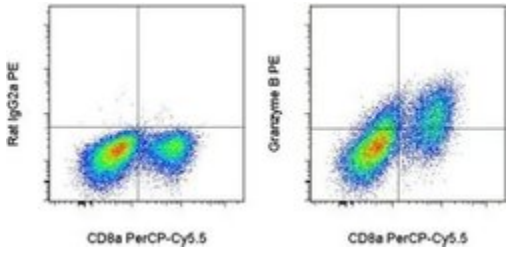
Applications Reported: This NGZB antibody has been reported for use in intracellular staining and flow cytometric analysis.

Applications Tested: This NGZB antibody has been tested by intracellular staining and flow cytometric analysis of mouse splenocytes using the Intracellular Fixation and 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 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.

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26 References

Flow Cytometry (26)

Oncoimmunology

The stress kinase GCN2 does not mediate suppression of antitumor T cell responses by tryptophan catabolism in experimental melanomas.

"Published figure using Granzyme B monoclonal antibody (Product # 12-8898-82) in Flow Cytometry"

Authors: Sonner JK,Deumelandt K,Ott M,Thomé CM,Rauschenbach KJ,Schulz S,Munteanu B,Mohapatra S,Adam I, Hofer AC,Feuerer M,Opitz CA,Hopf C,Wick W,Platten M

Species
Not Applicable

Dilution
Not Cited

Year
2019

Frontiers in immunology

1810011o10 Rik Inhibits the Antitumor Effect of Intratumoral CD8^{+} T Cells through Suppression of Notch2 Pathway in a Murine Hepatocellular Carcinoma Model.

"Published figure using Granzyme B monoclonal antibody (Product # 12-8898-82) in Flow Cytometry"

Authors: Dai K,Huang L,Huang YB,Chen ZB,Yang LH,Jiang YA

Species
Mouse
Not Applicable

Dilution
Not Cited
Not Cited

Year
2019

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