

Granzyme B Monoclonal Antibody (NGZB), PerCP-eFluor™ 710, 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), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	NGZB
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 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_11219476

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	34 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 and 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 0.06 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 10⁴ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

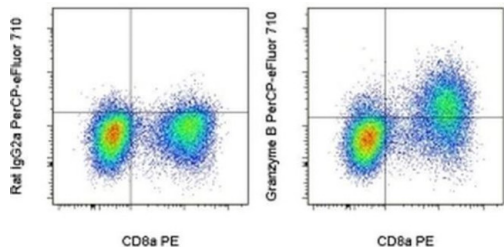
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) 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 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Granzyme B Monoclonal Antibody (NGZB), PerCP-eFluor™ 710, eBioscience™



Granzyme B Antibody (46-8898-82) in Flow
Intracellular staining of 3-day Anti-Mouse CD3 and Anti-Mouse CD28 Functional Grade Purified (Product # 16-0031-82 and Product # 16-0281-82)-stimulated C57Bl/6 splenocytes with Anti-Mouse CD8a PE (Product # 12-0081-82) and 0.03 µg of Rat IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4321-82) (left) or 0.03 µg of Anti-Mouse Granzyme B PerCP-eFluor® 710 (right). Total viable cells, as determined by Fixable Viability Dye eFluor® 450, were used for analysis.

View more figures on thermofisher.com

34 References

Flow Cytometry (34)

<p>Cancer research communications</p> <p>Small-molecule PTPN2 Inhibitors Sensitize Resistant Melanoma to Anti-PD-1 Immunotherapy.</p> <p>"Published figure using Granzyme B monoclonal antibody (Product # 46-8898-82) in Flow Cytometry"</p> <p>Authors: Zhu Z,Tang R,Huff S,Kummetha IR,Wang L,Li N,Rana TM</p>	<p>Year</p> <p>2023</p>
<p>Nature communications</p> <p>PRDM1/BLIMP1 induces cancer immune evasion by modulating the USP22-SPI1-PD-L1 axis in hepatocellular carcinoma cells.</p> <p>"Published figure using Granzyme B monoclonal antibody (Product # 46-8898-82) in Flow Cytometry"</p> <p>Authors: Li Q,Zhang L,You W,Xu J,Dai J,Hua D,Zhang R,Yao F,Zhou S,Huang W,Dai Y,Zhang Y,Baheti T,Qian X,Pu L, Xu J,Xia Y,Zhang C,Tang J,Wang X</p>	<p>Year</p> <p>2022</p>

View more Flow references on thermofisher.com

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.