Granzyme A Monoclonal Antibody (GzA-3G8.5), PE-Cyanine7, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GzA-3G8.5
Conjugate	PE-Cyanine7
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_2573476

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	1 Publication

Product Specific Information

Description: This Gza-3G8.5 monoclonal antibody reacts with mouse Granzyme A. Granzyme A is the most abundantly expressed of the ten granzyme serine proteases that have been identified in mice. Granzymes are proteins released from the granules of NK cells and cytotoxic T lymphocytes that induce death in target cells by cleavage of intracellular substrates and play a critical role in immune defense against viruses, tumors, and intracellular bacteria. Granzyme A activates caspase-independent cell death pathways morphologically similar to apoptosis and characterized by mitochondrial and DNA damage. It may also play a role in inflammation, as the precursor form of IL-1 beta (pro-IL-1 beta) is among its target substrates. Granzyme A shares overlapping substrate specificity with the closely-related Granzyme K, which is believed to account for the minimal decrease in cytotoxicity of Granzyme A-deficient CTLs.

Applications Reported: This GzA-3G8.5 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This GzA-3G8.5 antibody has been tested by intracellular staining followed by flow cytometric analysis of mouse splenocytes. 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

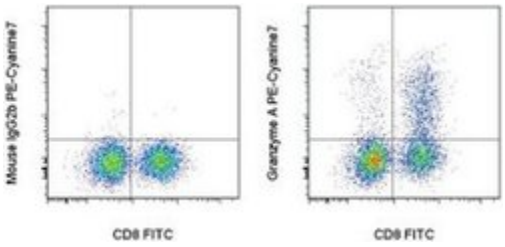
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (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: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Granzyme A Monoclonal Antibody (GzA-3G8.5), PE-Cyanine7, eBioscience™



Granzyme A Antibody (25-5831-82) in Flow
Balb/c splenocytes were cultured with Anti-Mouse CD3e and Anti-Mouse CD28 Functional Grade Purified (Product # 16-0031-82 and 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 FITC (Product # 11-0081-82) followed by intracellular staining with 0.03 µg of Mouse IgG2b K Isotype Control PE-Cyanine7 (Product # 25-4732-81) (left) or 0.03 µg of Anti-Mouse Granzyme A PE-Cyanine7 (right). Cells in the lymphocytes gate were used for analysis.

1 Reference

Flow Cytometry (1)

The Journal of clinical investigation

TGF- receptor maintains CD4 T helper cell identity during chronic viral infections.

"25-5831 was used in Flow cytometry/Cell sorting to uncover an eomesodermin-driven CD4 T cell program that is continuously suppressed by TGF- signalling."

Authors: Lewis GM,Wehrens EJ,Labarta-Bajo L,Streeck H,Zuniga EI

Species
Mouse

Dilution
Not Cited

Year
2016