Granzyme A Monoclonal Antibody (GzA-3G8.5), eFluor™ 450, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GzA-3G8.5
Conjugate	eFluor™ 450
Excitation/Emission Max	405/445 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_2574079

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	2 Publications

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.

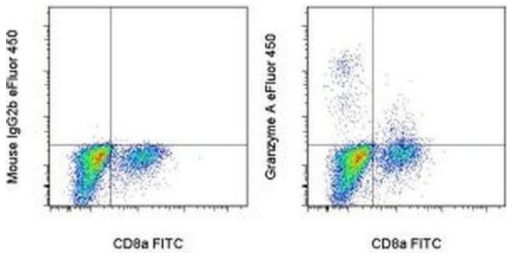
Applications Tested: This GzA-3G8.5 antibody has been tested by intracellular staining followed by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume 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.

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 fluorochome.

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

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Granzyme A Monoclonal Antibody (GzA-3G8.5), eFluor™ 450, eBioscience™



Granzyme A Antibody (48-5831-82) 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 0.125 µg of Mouse IgG2b K Isotype Control eFluor® 450 (Product # 48-4732-82) (left) or 0.125 µg of Anti-Mouse Granzyme A eFluor® 450 (right). Cells in the lymphocyte gate were used for analysis.

2 References

Flow Cytometry (2)

Frontiers in immunology

Intranasal Delivery of Recombinant S100A8 Protein Delays Lung Cancer Growth by Remodeling the Lung Immune Microenvironment.

"Published figure using Granzyme A monoclonal antibody (Product # 48-5831-82) in Flow Cytometry"

Authors: Wong SW,McCarroll J,Hsu K,Geczy CL,Tedla N

Year
2022

Nature communications

LIF regulates CXCL9 in tumor-associated macrophages and prevents CD8$^+$ T cell tumor-infiltration impairing anti-PD1 therapy.

"48-5831-82 was used in Flow Cytometry to study the effect of the combination of LIF neutralising antibodies with the inhibition of the PD1 immune checkpoint on tumour progression."

Authors: Pascual-García M,Bonfill-Teixidor E,Planas-Rigol E,Rubio-Perez C,Iurlaro R,Arias A,Cuartas I,Sala-Hojman A,Escudero L,Martínez-Ricarte F,Huber-Ruano I,Nuciforo P,Pedrosa L,Marques C,Braña I,Garralda E,Vieito M,Squatrito M,Pineda E,Graus F,Espejo C,Sahuquillo J,Tabernero J,Seoane J

Year
2019

Species
Mouse

Dilution
1:80