# Granzyme K Monoclonal Antibody (G3H69), PerCP-eFluor™ 710, eBioscience™

| Product Details | |
|---|---|
| Size | 100 Tests |
| Species Reactivity | Human |
| Published Species | Human |
| Host/Isotype | Mouse / IgG2a, kappa |
| Recommended Isotype Control | Mouse IgG2a kappa Isotype Control (eBM2a), PerCP-eFluor™ 710, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | G3H69 |
| Conjugate | PerCP-eFluor™ 710 |
| Excitation/Emission Max | 482/708 nm |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.2% BSA |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_2573854 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Flow Cytometry (Flow) | 5 µL (0.03 µg)/test | 4 Publications |

## Product Specific Information

Description: This G3H69 monoclonal antibody reacts with human Granzyme K. Granzyme K is one of five granzyme serine proteases that have been identified in humans. These proteins are expressed in the granules of NK cells and cytotoxic T cells, and are critical for the induction of target cell apoptosis through the cleavage of intracellular substrates. Granzyme A and Granzyme K are both tryptases and appear to show overlapping, though not identical, substrate specificity. This functional similarity is believed to account for the minimal decrease in cytotoxicity of Granzyme A-deficient CTLs.

Applications Reported: This G3H69 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This G3H69 antibody has been pre-titrated and tested by intracellular staining followed by flow cytometric analysis of normal human peripheral blood monocytes. This can be used at 5 µL (0.03 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.

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.

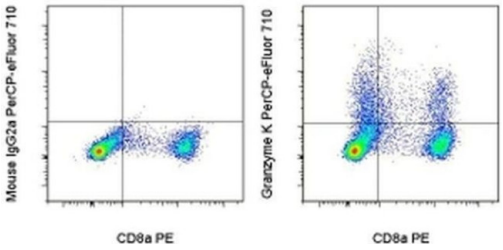
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step

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 K Monoclonal Antibody (G3H69), PerCP-eFluor™ 710, eBioscience™




**Granzyme K Antibody (46-8897-42) in Flow**
Normal human peripheral blood monocytes were stimulated for 3 days with Human IL-2 Recombinant Protein (Product # 14-8029-81), then cultured with Protein Transport Inhibitor Cocktail (Product # 00-4980-03) for an additional 5 hours. The cells were stained with Anti-Human CD8a PE (Product # 12-0087-42) and Mouse IgG2a Isotype Control PerCP-eFluor® 710 (Product # 46-4724-82) (left) or Anti-Human Granzyme K PerCP-eFluor® 710 (right) using the Intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00). Cells in the lymphocyte gate were used for analysis.

## 4 References

### Flow Cytometry (4)

**Immunity**

**Year**
2021

**Species**
Human

#### $CD8^+$ T cells specific for an immunodominant SARS-CoV-2 nucleocapsid epitope display high naive precursor frequency and TCR promiscuity.

"46-8897-42 was used in Flow Cytometry to demonstrate high naive precursor frequency and TCR diversity within immunodominant B7/N105-specific CD8+ T cells and provide insight into SARS-CoV-2-specific T cell origins and subsequent responses."

Authors: Nguyen THO,Rowntree LC,Petersen J,Chua BY,Hensen L,Kedzierski L,van de Sandt CE,Chaurasia P,Tan HX, Habel JR,Zhang W,Allen LF,Earnest L,Mak KY,Juno JA,Wragg K,Mordant FL,Amanat F,Krammer F,Mifsud NA,Doolan DL,Flanagan KL,Sonda S,Kaur J,Wakim LM,Westall GP,James F,Mouhtouris E,Gordon CL,Holmes NE,Smibert OC, Trubiano JA,Cheng AC,Harcourt P,Clifton P,Crawford JC,Thomas PG,Wheatley AK,Kent SJ,Rossjohn J,Torresi J, Kedzierska K

**Journal of virology**

**Year**
2017

**Species**
Human

#### Human Asymptomatic Epitopes Identified from the Herpes Simplex Virus Tegument Protein VP13/14 (UL47) Preferentially Recall Polyfunctional Effector Memory CD44high CD62Llow CD8+ TEM Cells and Protect Humanized HLA-A*02:01 Transgenic Mice against Ocular Herpesvirus Infection.

"46-8897 was used in Flow cytometry/Cell sorting to outline the phenotypic and functional features of protective HSV-specific CD8 T cells that should guide the development of a safe and effective T-cell-based herpes simplex vaccine."

Authors: Srivastava R,Khan AA,Garg S,Syed SA,Furness JN,Vahed H,Pham T,Yu HT,Nesburn AB,BenMohamed L

View more Flow references on thermofisher.cn