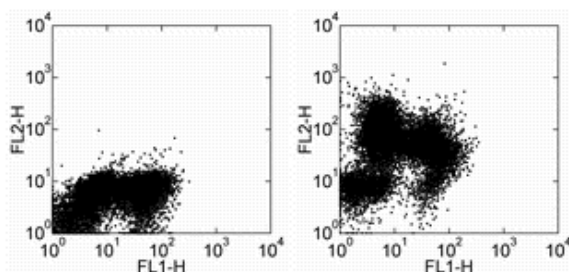


Anti-Mouse Granzyme B PE (To Be Discontinued. Refer to Alternative Product: cat 12-8898)

Catalog Number: 12-8822

Also Known As: GrzB, GrB

RUO: For Research Use Only. Not for use in diagnostic procedures.



C57BL/6 splenocytes were treated with 500 U/ml Mouse IL-2 Recombinant Protein (cat. 14-8021) for 3 days and stained with Anti-Mouse CD8a FITC (cat. 11-0081). Subsequently, cells were fixed and permeabilized (cat. 88-8823) and stained with Rat IgG2b kappa Isotype Control PE (cat. 12-4031) (left) or 0.125 ug of Anti-Mouse Granzyme B PE. Total cells were used for analysis.

Product Information

Contents: Anti-Mouse Granzyme B PE (To Be Discontinued. Refer to Alternative Product: cat 12-8898)

REF Catalog Number: 12-8822

Clone: 16G6

Concentration: 0.2 mg/ml

Host/Isotype: Rat IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

Description

The 16G6 antibody reacts with mouse Granzyme B (GrB) which is a member of the granzyme serine protease family. GrB 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. GrB has been called 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. GrB 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.

For intracellular staining and flow cytometric analysis with direct conjugates of anti-mouse Granzyme B, it is highly recommended to use the Foxp3 Staining Buffer Set (cat. 00-5523). Other buffers may yield varying results. For more information, please contact technical support at tech@ebioscience.com.

Applications Reported

This 16G6 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This 16G6 antibody has been tested by intracellular staining and flow cytometric analysis of fixed and permeabilized IL-2 stimulated splenocytes using IC Cytokine Staining Protocol. This can be used at less than or equal to 0.125µg per million cells in 100 µl staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Akha AA, Berger SB, Miller RA. Enhancement of CD8 T-cell function through modifying surface glycoproteins in young and old mice. *Immunology*. 2006 Oct;119(2):187-94. (16G6, Intracellular Flow, PubMed)

Kapp JA, Honjo K, Kapp LM, Xu XY, Cozier A, Bucy RP. TCR transgenic CD8+ T cells activated in the presence of TGFbeta express FoxP3 and mediate linked suppression of primary immune responses and cardiac allograft rejection. *Int Immunol*. 2006; 1-14. (16G6, IC flow, PubMed)

Kilinc MO, Aulakh KS, Nair RE, Jones SA, Alard P, Kosiewicz MM, Egilmez NK. Reversing Tumor Immune Suppression with Intratumoral IL-12: Activation of Tumor-Associated T Effector/Memory Cells, Induction of T Suppressor Apoptosis, and Infiltration of CD8+ T Effectors. *J Immunol*. 2006 Nov 15;177(10):6962-73 (16G6, IC Flow, PubMed)

Smyth, M., et al. 1995. Granzymes: exogenous proteinases that induce target cell apoptosis. Immunol Today. 16: 202-206.

Shafer-Weaver, K., et al. 2003. The Granzyme B ELISPOT assay: an alternative to the 51Cr-release assay for monitoring cell-mediated cytotoxicity. J. Translational Med. 1: 14.

Rininsland, F., et al. 2000. Granzyme B ELISPOT assay for ex vivo measurements of T cell immunity. J Immunol Meth. 240:143-155.

Related Products

00-8222 IC Fixation Buffer

00-8333 Permeabilization Buffer (10X)

11-0081 Anti-Mouse CD8a FITC (53-6.7)

12-4031 Rat IgG2b K Isotype Control PE

12-8899 Anti-Human Granzyme B PE (GB11)

14-8021 Mouse IL-2 Recombinant Protein

88-8022 Mouse Granzyme B ELISA Ready-SET-Go!®

88-8399 Human Granzyme B ELISPOT Ready-SET-Go!®

88-8823 Fixation & Permeabilization Buffers

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com