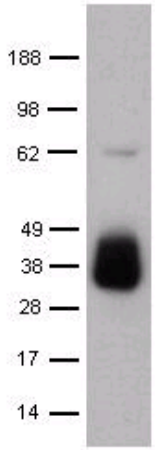
full spectrum cell analysis®
eBioscience®

# Anti-Mouse Granzyme B Purified

Catalog Number: 14-8822
Also Known As:GrzB, GrB
RUO: For Research Use Only




BALB/c splenocytes were stimulated with Mouse IL-2 Recombinant (100 ng/ml) (cat. 14-8021) for 3 days. Subsequently, splenocyte lysates were loaded at $1x10^6$ cells/lane, probed with 1 µg/mL Anti-Mouse Granzyme B Purified and revealed with Anti-Rat IgG HRP.

## Product Information

Contents: Anti-Mouse Granzyme B Purified
REF Catalog Number: 14-8822
Clone: 16G6
Concentration: 0.5 mg/ml
Host/Isotype: Rat IgG2b, κ

Formulation: aqueous buffer, 0.09% sodium azide, contains carrier protein/stabilizer if necessary
Temperature Limitation: Store at 2-8°C.
LOT 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 immunoblotting (WB) as well as ELISA.

## Applications Tested

The unlabelled 16G6 antibody has been tested as the capture antibody in a sandwich ELISA for quantitation of mouse granzyme B protein levels, in combination with the biotinylated eBioLUEE (13-8821) antibody for detection and recombinant mouse granzyme B as the standard. A suitable range of concentrations of this antibody for ELISA detection is 1-4 µg/ml.

The 16G6 antibody has been tested for Western blotting; a recommended starting concentration is 1 ug/ml.

## 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)
12-8899 Anti-Human Granzyme B PE (GB11)
14-4031 Rat IgG2b K Isotype Control Purified
88-8022 Mouse Granzyme B ELISA Ready-SET-Go!®
88-8399 Human Granzyme B ELISPOT Ready-SET-Go!®
88-8823 Fixation & Permeabilization Buffers


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