

## Anti-Human GM-CSF-159Tb

**Catalog #:** 3159008B

**Package Size:** 100 tests

**Storage:** Store product at 4°C. Do not freeze.

**Cross Reactivity:** Cynomolgus Monkey, Rhesus

**Clone:** BVD2-21C11

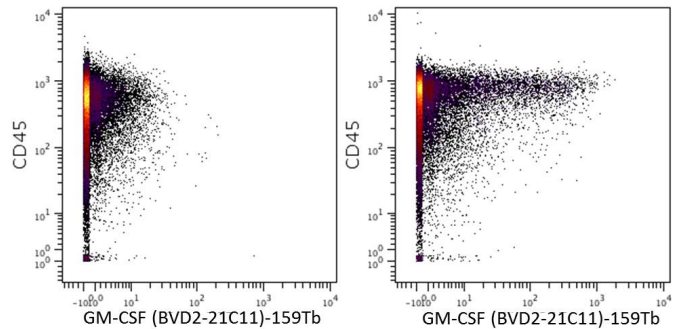
**Isotype:** Rat IgG2a

**Formulation:** Antibody stabilizer with 0.05% Sodium Azide

### Technical Information

**Validation:** Each lot of conjugated antibody is quality control tested by CyTOF<sup>®</sup> analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

**Recommended Usage:** The suggested use is 1 µl for up to 3 X 10<sup>6</sup> live cells in 100 µl. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human PBMCs were incubated for 6 hours in media alone (left) or with PMA and Ionomycin (right) in the presence of monensin and brefeldin A. Cells were then fixed, permeabilized, and stained with 154Sm-anti-CD45 (HI30) and 159Tb-anti-GM-CSF (BVD2-21C11).

### Description

GM-CSF, together with G-CSF, M-CSF, IL-3 and IL-5 belong to the family of hematopoietic cytokines. GM-CSF is secreted by a variety of cell types including monocytes, endothelial cells, activated T and B lymphocytes, fibroblasts and LPS-stimulated macrophages. GM-CSF function is mediated by binding to a high-affinity receptor composed of the GM-CSF-specific  $\alpha$  chain and a  $\beta$  chain which is shared with the IL-3 and IL-5 receptors. In addition to its hematopoietic properties, GM-CSF mediates critical functions in the response to external stimuli, inflammation and the anti-tumor response.

### References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Newell, E.W., et al. Cytometry by Time-of-Flight Shows Combinatorial Cytokine Expression and Virus-Specific Cell Niches within a Continuum of CD8+ T Cell Phenotypes. *Immunity* 36 January 2012: 142-152.

Ornatsky, O. I., et al. Highly multiparametric analysis by mass cytometry. *J Immunol Methods* 361 (1-2):1-20, 2010

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