

**PE/Dazzle™ 594 anti-mouse GM-CSF**

**Catalog # / Size:** 3127110 / 100 µg  
3127105 / 25 µg

**Clone:** MP1-22E9

**Isotype:** Rat IgG2a, κ

**Immunogen:** Yeast-expressed, recombinant mouse GM-CSF

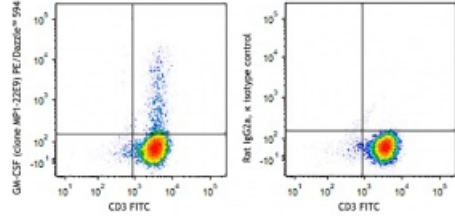
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Workshop Number:** HCDM listed

**Concentration:** 0.2 mg/ml



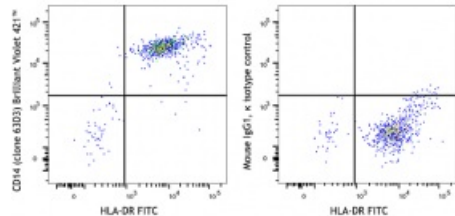
Cell Activation Cocktail-stimulated Th2-polarized C57BL/6 splenocytes were intracellularly stained with CD3 FITC and GM-CSF (clone MP1-22E9) PE/Dazzle™ 594 (left) or rat IgG2a, κ Isotype Control (right) PE/Dazzle™ 594.

**Applications:**

**Applications:** Intracellular Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.



Human peripheral blood monocytes were stained with HLA-DR FITC and Brilliant Violet™ 421™ anti-human CD14 (clone 63D3) (left) or Brilliant Violet™ 421™ mouse IgG1, κ isotype control (right).

**Application Notes:** **ELISA or ELISPOT Capture<sup>1,3-5</sup>:** The purified MP1-22E9 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated MP1-31G6 antibody as the detecting antibody.

**Flow Cytometry<sup>8</sup>:** The fluorochrome-labeled MP1-22E9 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify GM-CSF -producing cells within mixed cell populations.

**Neutralization<sup>2-4</sup>:** The MP1-22E9 antibody can neutralize the bioactivity of natural or recombinant GM-CSF.

**Additional reported applications (for the relevant formats)**

**include:** immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections<sup>1,6,7</sup>, and immunocytochemistry<sup>8</sup>.

**Application References:**

1. Sander B, *et al.* 1993. *J. Immunol. Methods* 166:201.
2. Suda T, *et al.* 1990. *Cell. Immunol.* 129:228.
3. Nozaki S, *et al.* 1991. *J. Invest. Dermatol.* 97:10.
4. Abrams JS, *et al.* 1992. *Immunol. Rev.* 127:5.
5. Abrams JS. 2001. *Curr. Protoc. Immunol.* Unit 6.20.
6. Sander B, *et al.* 1991. *Immunol. Rev.* 119:65.
7. Andersson U, *et al.* 1999. *Detection and quantification of gene expression.* New York:Springer-Verlag.
8. Larkin J, *et al.* 2006. *J. Immunol.* 177:268.

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**Description:**

GM-CSF is a hematopoietic factor that is produced by T cells, macrophages, fibroblasts and endothelial cells. This multifunctional cytokine stimulates progenitor cells of neutrophils, eosinophils, and macrophages. GM-CSF is also a differentiation and activating factor for granulocytic and monocytic cells.

**Antigen References:**

1. Fitzgerald, K., *et al.* Eds. 2001. *The Cytokine FactsBook.* Academic Press, San Diego.
2. Demetri, G., *et al.* 1991. *Blood* 78:2791.
3. Fan, D., *et al.* 1991. *In vivo* 5:571.
4. Negrin, R., *et al.* 1992. *Adv. Pharmacol.* 23:263.