

Pacific Blue™ anti-mouse GM-CSF

Catalog # / Size: 3127125 / 25 µg

Clone: MP1-22E9

Isotype: Rat IgG2a, κ

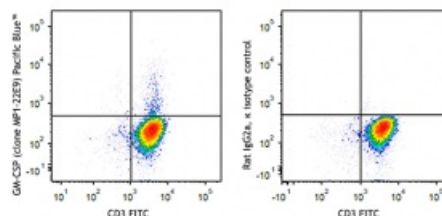
Immunogen: Yeast-expressed, recombinant mouse GM-CSF

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

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

Concentration: Lot-specific



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

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 ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes:

ELISA or ELISPOT Capture^{1,3-5}: 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 Cytometry⁸: 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.

Neutralization²⁻⁴: 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^{1,6,7}, and immunocytochemistry⁸.

**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.