SONY

Product Data Sheet

APC/Fire™ 750 anti-mouse GM-CSF

Catalog # / Size: 3127115 / 25 µg
3127120 / 100 µg

Clone: MP1-22E9

Isotype: Rat IgG2a, κ

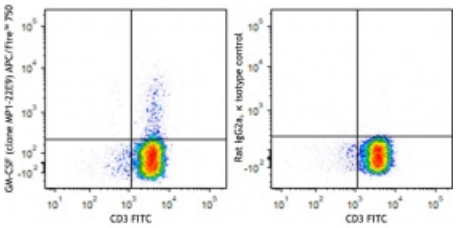
Immunogen: Yeast-expressed, recombinant mouse GM-CSF

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

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

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) APC/Fire™ 750 (left) or rat IgG2a, κ isotype control (right) APC/Fire™ 750.

Applications:

Applications: Intracellular Staining for 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.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

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 (Cat. No. 505502) as the detecting antibody. The LEAF™ purified antibody is suggested for ELISPOT capture.

Flow Cytometry[8]: 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[2-4]: The MP1-22E9 antibody can neutralize the bioactivity of natural or recombinant GM-CSF. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for *in vivo* and *in vitro* neutralization (Cat. No. 505408).

Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections[1,6,7], and immunocytochemistry[8].

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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.

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.