SONY

Product Data Sheet

Pacific Blue™ anti-human GM-CSF

Catalog # / Size: 3111570 / 100 tests
3111565 / 25 tests

Clone: BVD2-21C11

Isotype: Rat IgG2a, κ

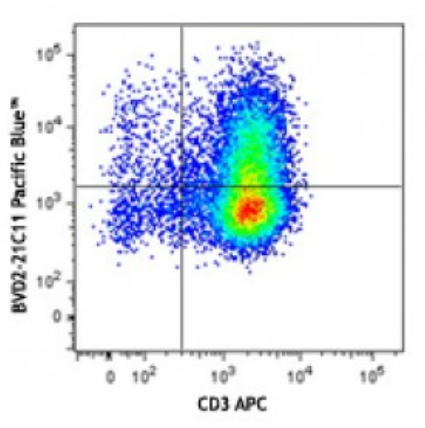
Immunogen: *E. coli*-expressed, recombinant human GM-CSF.

Reactivity: Human

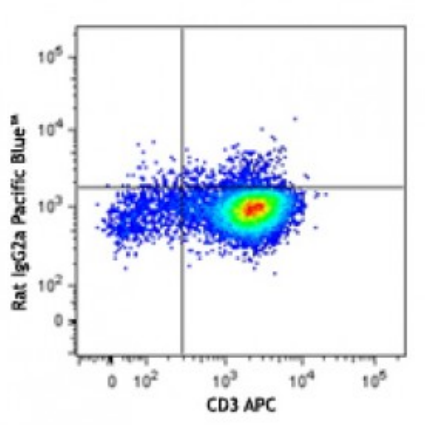
Preparation: The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



PMA and ionomycin-stimulated Th2-polarized human peripheral blood lymphocytes were surface stained with CD3 APC and intracellularly stained with GM-CSF (clone BVD2-21C11) Pacific Blue™ (top) or rat IgG2a, κ Pacific Blue™ isotype control



Applications:

Applications: 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 5 microL per million cells or 5 microL per 100 microL of whole blood. 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[1-4] or ELISPOT[3,4] Detection:** The biotinylated BVD2-21C11 antibody is useful as a detection antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the purified BVD2-23B6 antibody (Cat. No. 502202/502204) as the capture antibody.
Flow Cytometry: The fluorochrome-labeled BVD2-21C11 is useful for intracellular immnunofluorescent

staining and flow cytometric analysis to identify GM-CSF-producing cells within mixed cell populations.
Neutralization: The BVD2-21C11 antibody can neutralize the bioactivity of natural or recombinant GM-CSF1.
Additional reported applications (for the relevant formats) include: immunoprecipitation1, Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated[5,6] and acetone-fixed[7] frozen tissue sections, and immunocytochemistry.
Note: For testing human GM-CSF in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 432001 to 432006) are specially developed and recommended.

Application References:

1. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5. (ELISA, Neut, IP)
2. Abrams J, *et al.* 1994. *Eosinophils in Allergy and Inflammation*. Marcel Dekker New York. p.133. (ELISA)
3. Bacchetta R, *et al.* 1990. *J. Immunol.* 144:902. (ELISA)
4. Kita H, *et al.* 1991. *J. Exp. Med.* 174:745. (ELISA)
5. Andersson U, *et al.* 1999. *Detection and quantification of gene expression*. New York:Springer-Verlag. (IHC)
6. Andersson J, *et al.* 1994. *Immunology* 83:16. (IHC)
7. Rasouli J, *et al.* 2015. *J. Immunol.* 11:5085-93. (IHC)

Description: Granulocyte/macrophage - colony stimulating factor (GM-CSF) is a hematopoietic factor that is produced by activated T cells, B cells, mast cells, macrophages, fibroblasts, and endothelial cells. In addition to supporting colony formation of granulocyte/macrophage progenitors, GM-CSF is a growth factor for erythroid, megakaryocyte, and eosinophil progenitors.

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.*<