TECHNICAL DATA SHEET

PE Anti-Mouse IL-4 (11B11)

Catalog Number: 50-7041

PRODUCT INFORMATION

Contents: PE Anti-Mouse IL-4 (11B11)

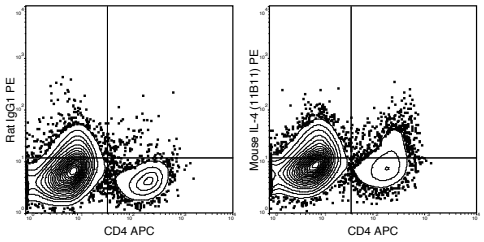
Isotype: Rat IgG1, kappa

Concentration: 0.2 mg/mL

Clone: 11B11

Reactivity: Mouse

Formulation: 10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 0.1% gelatin, pH7.2



Mouse lymphoid cells were stimulated in the presence of a protein transport inhibitor. Cells were then fixed, permeabilized, stained with APC Anti-Mouse CD4 and intracellularly with 0.125 ug PE Anti-Mouse IL-4 (50-7041) (right panel) or 0.125 ug PE Rat IgG1 (left panel).

DESCRIPTION

The 11B11 antibody binds to mouse Interleukin-4 (IL-4), a 14 kDa cytokine that is largely secreted by activated T cells of the Th2 subset, and to some degree by NKT and mast cells. This cytokine acts as a stimulatory factor for B cells, inducing their proliferation and differentiation, as well as playing a role in immunoglobulin class-switching. IL-4 may also provide autocrine stimulation for T cells, and affect the function of antigen presenting cells such as macrophages and dendritic cells. IL-4 can bind and signal via three cell surface receptor types: CD124 by itself, CD124 in combination with the common gamma chain (type I complex), or CD124 combined with CD213a1 (type II complex).The 11B11 antibody is widely used for detection of intracellular levels of IL-4 protein by flow cytometry, as well as for analysis of soluble cytokine as measured by ELISA, and in functional assays to neutralization cytokine-receptor interactions.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Cook PC, Jones LH, Jenkins SJ, Wynn TA, Allen JE, and MacDonald AS. 2012. Proc. Natl. Acad. Sci. 109: 9977-9982. (in vivo blocking). Altin JA, Goodnow CC, and Cook MC. 2012. J. Immunol. 5478-5488. (Flow cytometry). Tofukuji S, Kuwahara M, Suzuki J, Ohara O, Nakayama T, and Yamashita M. 2012. J. Immunol. 188: 4846-4857. (in vitro Th1 polarization). Weber KS, Hildner K, Murphy KM and Allen PM. 2010 J. Immunol. 185: 2836-2846 (in vitro Th1 polarization, ELISA). Odobasic D, Kitching AR, Semple TJ, Timoshanko JR, Tipping PG, and Holdsworth SR. 2005. J. Am. Soc. Nephrol. 16: 2012-2022. (in vivo activation, Immunofluorescence microscopy – frozen tissue, Immunohistochemistry – frozen tissue).

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.