

PE/Cy7 anti-mouse IL-4

Catalog # / Size: 3120585 / 25 µg
3120590 / 100 µg

Clone: 11B11

Isotype: Rat IgG1, κ

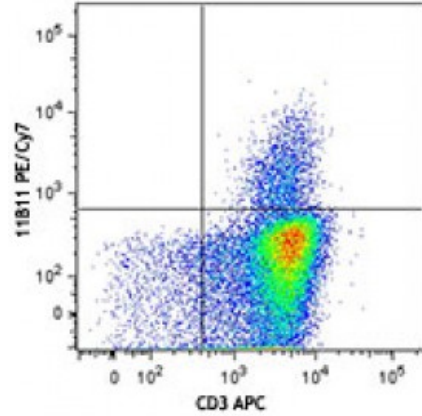
Immunogen: Partially purified native mouse IL-4

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

Concentration: 0.2

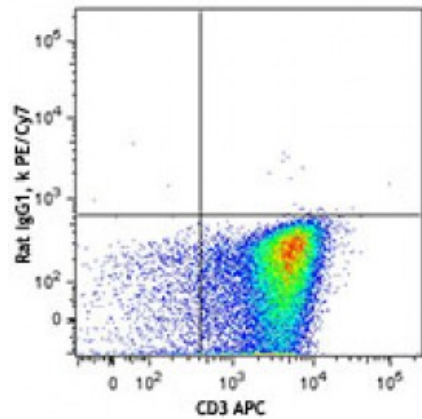


PMA+ionomycin-stimulated (in presence of Brefeldin A for 6 hours) Th2-polarized C57BL/6 mouse CD4+ T cells were surface stained with CD3 and then intracellularly stained with IL-4 (clone 11B11) PE/Cy7 (top) or rat IgG1, κ PE/Cy7 isotype control (bottom)

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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



Application Notes: **ELISA^{1,2,10,13} or ELISPOT⁵ Capture:** The purified 11B11 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated BVD6-24G2 antibody (Cat. No. 504202) as the detecting antibody and recombinant mouse IL-4 (Cat. No. 575609) as the standard. The LEAF™ purified antibody is suggested for ELISPOT capture.

Neutralization^{1-2,9,12}: The 11B11 antibody can neutralize the bioactivity of natural or recombinant IL-4. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of mouse IL-4 bioactivity *in vivo* and *in vitro* (Cat. No. 504108).

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

immunoprecipitation¹⁶,
immunohistochemical staining of
formalin-fixed paraffin-embedded tissue
sections⁸ and paraformaldehyde-fixed,
saponin-treated frozen tissue
sections^{6,7}, and
immunocytochemistry⁴.

Note: For testing mouse IL-4 in serum,
plasma or supernatant, BioLegend's
ELISA Max™ Sets (Cat. No. 431101 to
431106) are specially developed and
recommended.

**Application
References:**

1. Shirai A, *et al.* 1994. *Cytokine* 6:329. (ELISA, Neut)
2. Abrams J. 1995. *Curr. Prot. Immunol.* John Wiley and Sons New York. Unit 6.20. (ELISA, Neut)
3. Assenmacher M, *et al.* 1994. *Eur. J. Immunol.* 24:1097.
4. Openshaw P, *et al.* 1995. *J. Exp. Med.* 182:1357. (ICC)
5. Klinman D, *et al.* 1994. *Curr. Prot. Immunol.* John Wiley and Sons New York. Unit 6.19. (ELISA Capture)
6. Litton M, *et al.* 1994. *J. Immunol. Methods* 175:47. (IHC)
7. Andersson U, *et al.* 1999. *Detection and quantification of gene expression.* New York:Springer-Verlag. (IHC)
8. Fan WY, *et al.* 2001. *Exp. Biol. Med.* 226:1045. (IHC)
9. Hara M, *et al.* 2001. *J. Immunol.* 166:3789. (Neut)
10. Dzhagalov I, *et al.* 2007. *J. Immunol.* 178:2113. (ELISA)
11. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
12. Wang W, *et al.* 2007. *J. Immunol.* 178:4885. (Neut)
13. Xu G, *et al.* 2007. *J. Immunol.* 179:5358. (ELISA) [PubMed](#)
14. Ohnmacht C, *et al.* 2008. *Blood* 113:2816. [PubMed](#)
15. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) [PubMed](#)
16. Zavorotinskaya T, *et al.* 2003. *Mol. Ther.* 7:155. (IP)
17. Shibata K, *et al.* 2014. *J. Immunol.* 192:2210. [PubMed](#)
18. Sharma SK, *et al.* 2015. *J Immunol.* 194:5529. [PubMed](#)

Description: IL-4 is a pleiotropic cytokine produced by activated T cells, mast cells, and basophils. IL-4 is a potent lymphoid cell growth factor which stimulates the growth and activation of certain B cells and T cells. IL-4 is important for regulation of T helper subset development.

**Antigen
References:**

1. Fitzgerald K, *et al.* Eds. 2001. *The Cytokine FactsBook.* Academic Press San Diego.
2. Boulay J, *et al.* 1992. *Curr. Opin. Immunol.* 4:294.
3. Dullens H, *et al.* 1991. *In vivo* 5:567.
4. Paul