

PE anti-mouse IL-4

Catalog # / Size: 3120520 / 100 µg
3120515 / 25 µg

Clone: 11B11

Isotype: Rat IgG1, κ

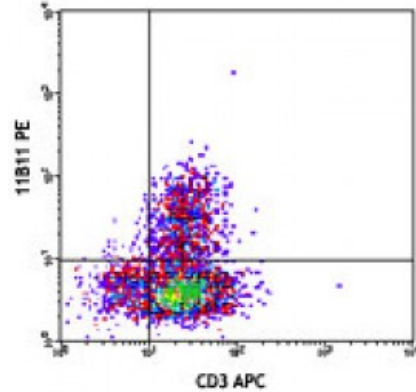
Immunogen: Partially purified native mouse IL-4

Reactivity: Mouse

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

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

Concentration: 0.2

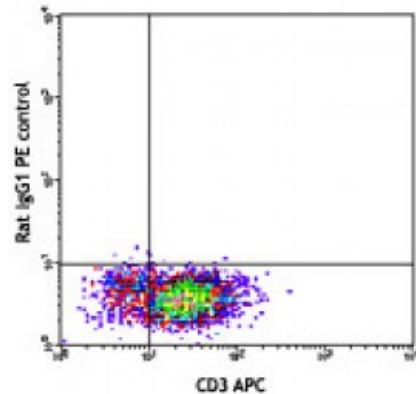


PMA+ionomycin-stimulated (6 hours, in presence of brefeldin A) Th2-polarized C57BL/6 CD4-positive cells were surface stained with CD3 APC and then intracellularly stained with IL-4 (11B11) PE (top) or Rat IgG1, κ PE isotype control (bottom).

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 ≤ 0.25 microg per 10⁶ 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:**
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 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)
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 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. Lu Y, *et al.* 2012. *Mol Immunol.* 52:229. [PubMed](#)
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 19. Bhattacharya D, *et al.* 2014. *J. Biol. Chem.* 289:16508. [PubMed](#)
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 21. Mykkanen OT, *et al.* 2014. *PLoS One.* 9:114790. [PubMed](#)
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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