

**PerCP/Cy5.5 anti-human IL-4**

**Catalog # / Size:** 3104105 / 25 tests  
3104110 / 100 tests

**Clone:** MP4-25D2

**Isotype:** Rat IgG1, κ

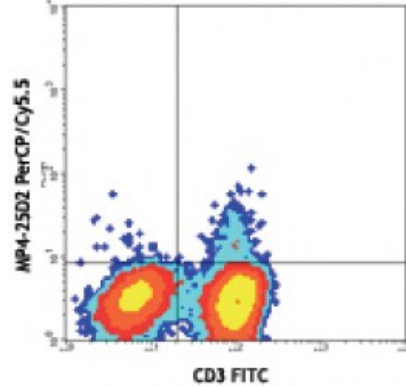
**Immunogen:** CHO-expressed, recombinant human IL-4

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

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

**Concentration:** Lot-specific



PMA/ionmycin-stimulated (6 hours) human peripheral blood lymphocytes intracellularly stained with CD3 FITC and MP4-25D2 PerCP/Cy5.5

**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.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**Application Notes:**

**ELISA Detection<sup>1,3</sup> or ELISPOT Detection<sup>4,5</sup>:** The biotinylated MP4-25D2 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified 8D4-8 antibody (Cat. No. 500702/500707) as the capture antibody.

**Flow Cytometry<sup>6,9</sup>:** The fluorochrome-labeled MP4-25D2 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IL-4 -producing cells within mixed cell populations.

**Neutralization<sup>1-3</sup>:** The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for neutralization of human IL-4 bioactivity (Cat. No. 500815). The MP4-25D2 antibody can neutralize the bioactivity of natural or recombinant IL-4.

**Application References:**

- Chretien I, *et al.* 1989. *J. Immunol. Methods* 117:67. (ELISA Detection, Neut)
- Ramanathan L, *et al.* 1993. *Biochem.* 32:3549. (Neut)
- Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5. (ELISA Detection, Neut)
- Mahanty S, *et al.* 1992. *J. Immunol.* 148:3567. (ELISPOT Detection)
- Klinman D, *et al.* 1994. *Curr. Prot. Immunol.* John Wiley and Sons New York. Unit 6.19. (ELISPOT Detection)
- Prussin C, *et al.* 1995. *J. Immunol. Methods* 188:117. (ICFC)
- Raqib R, *et al.* 1995. *Infect. Immun.* 63:289.
- Andersson J, *et al.* 1994. *Immunology* 83:16.
- Iwamoto S, *et al.* 2007. *J. Immunol.* 179:1449. (ICFC) [PubMed](#)

10. Kubota M, *et al.* 1997. *J. Immunol.* 158:5321.
  11. Dzhagalov I, *et al.* 2007. *J. Immunol.* 178:2113. [PubMed](#)
  12. Kroneke MA, *et al.* 2012. *J. Immunol.* 188:3734. [PubMed](#)
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**Description:** IL-4 is a pleiotropic cytokine that is produced by activated T cells, mast cells, and basophils. IL-4 elicits many different biological responses but has two dominant functions. The first is regulating differentiation of naïve CD4<sup>+</sup> T cell to the Th2 type. Th2 cells produce IL-4, IL-5, IL-10, and IL-13, which tend to favor a humoral immune response while suppressing a cell-mediated immune response controlled by Th1 cells. The second is regulating IgE and IgG1 production by B cells.

**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