

APC anti-human IL-4

Catalog # / Size: 500811 / 25 tests
500812 / 100 tests

Clone: MP4-25D2

Isotype: Rat IgG1, κ

Immunogen: CHO-expressed, recombinant human IL-4

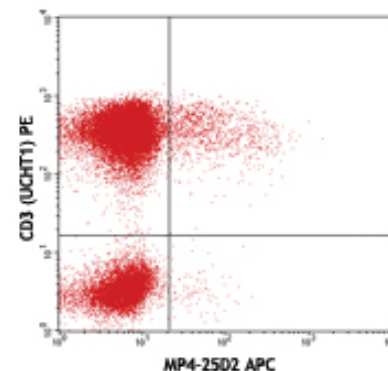
Reactivity: Human, **Cross-Reactivity:** Swine (Pig, Porcine), Rhesus

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

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

Concentration: test sizes: lot-specific; μ g size: 0.2 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



PMA + ionomycin-stimulated (6 hours) human peripheral blood lymphocytes intracellularly stained with MP4-25D2 APC and CD3 (UCHT1) PE

Applications:

Applications: ICFC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 μ l to 5 μ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 μ l staining volume or per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: **ELISA Detection^{1,3} or ELISPOT Detection^{4,5}:** 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^{6,9}: 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. For intracellular cytokine staining protocol, please visit www.biolegend.com and click on the support section.
Neutralization¹⁻³: The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m 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
- Kubota M, et al. 1997. *J. Immunol.* 158:5321.
- Dzhagalov I, et al. 2007. *J. Immunol.* 178:2113. PubMed

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⁺ 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:

- Fitzgerald K, et al. Eds. 2001. *The Cytokine FactsBook*. Academic Press San Diego.
- Boulay J, et al. 1992. *Curr. Opin. Immunol.* 4:294.
- Dullens H, et al. 1991. *In vivo* 5:567.
- Paul W. 1991. *Blood* 77:1859.

Related Products:

Product
Cell Staining Buffer
Fixation Buffer

Clone

Application
FC, ICC, ICFC
ICC, ICFC



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Permeabilization Wash Buffer (10X)
RBC Lysis Buffer (10X)
Brefeldin A Solution (1,000X)
Monensin Solution (1,000X)
APC Rat IgG1, κ Isotype Ctrl

RTK2071

ICC, ICFC, IHC
FC, ICFC
ICFC
ICFC
FC, ICFC



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