

Product Data Sheet

FITC anti-human IL-4

Catalog # / Size: 500807 / 50 µg
500806 / 100 tests

Clone: MP4-25D2

Isotype: Rat IgG1, κ

Immunogen: CHO-expressed, recombinant human IL-4

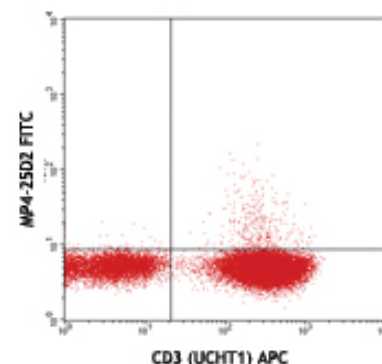
Reactivity: Human, **Cross-Reactivity:** Swine (Pig, Porcine), Rhesus

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

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

Concentration: test size: lot-specific; µg size: 0.5 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 stained with MP4-25D2 FITC and CD3 (UCHT1) APC

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 µl to 5 µl per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl 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.

Neutralization⁷⁻³: 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
 - Kubota M, et al. 1997. *J. Immunol.* 158:5321.
 - Dzhagalov I, et al. 2007. *J. Immunol.* 178:2113. PubMed
 - Tijn, EP., et al. 2011. *Clin Cancer Res.* 17:5736. 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)
FITC Rat IgG1, κ Isotype Ctrl

RTK2071

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



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