

Product Data Sheet

APC anti-human IL-4

Catalog # / Size: 500713 / 25 tests
500714 / 100 tests

Clone: 8D4-8

Isotype: Mouse IgG1, κ

Immunogen: Yeast-expressed, recombinant human IL-4

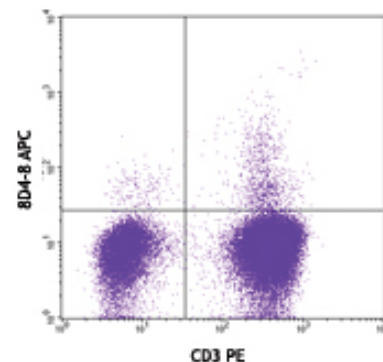
Reactivity: Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus

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.**



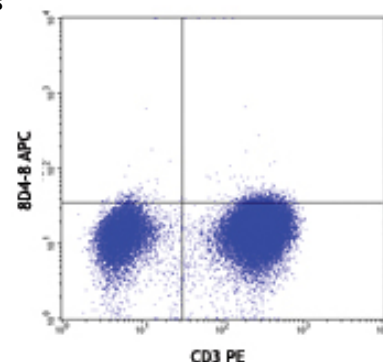
PMA+ionomycin-stimulated human peripheral blood mononuclear cells surface stained CD3 PE and intracellularly stained with 8D4-8 APC (top), bottom data demonstrates staining can be specifically blocked by pre-incubation of the cells with purified 8D4-8 antibody (gated on lymphocyte population).

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: **ELISA³ or ELISPOT⁴ Capture:** The purified 8D4 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated MP4-25D2 antibody (Cat. No. 500804/500816) as the detecting antibody. The LEAF™ purified antibody is suggested for ELISPOT capture.
Flow Cytometry^{2,5}: The fluorochrome-labelled 8D4-8 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: 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. 500707).
Additional reported applications (for the relevant formats) include: immunoprecipitation, immunohistochemical staining⁶ of paraformaldehyde-fixed, saponin-treated frozen tissue sections, and immunocytochemistry.
Note: For testing human IL-4 in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 430301 to 430306) are specially developed and recommended.



- Application References:**
1. Bird C, *et al.* 1991. *Cytokine*. 3:562.
 2. Prussin C, *et al.* 1995. *J. Immunol. Meth.* 188:117.
 3. Hickie I, *et al.* 2001. *Twin Res.* 4:94.
 4. Heeger P, *et al.* 1999. *J. Immunol.* 163:2267.
 5. Jason J, *et al.* 1999. *Clin. Diagn. Lab Immunol.* 6:73.
 6. Andersson U, *et al.* 1999. *Detection and quantification of gene expression*. New York:Springer-Verlag.
 7. Gong G, *et al.* 2008. *Blood* PubMed
 8. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

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



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suppressing a cell-mediated immune response controlled by Th1 cells. The second is regulating IgE and IgG1 production by B cells. The 8D4-8 antibody can neutralize the bioactivity of natural or recombinant IL-4.

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 W. 1991. *Blood.* 77:1859.

Related Products:	Product	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	APC Mouse IgG1, κ Isotype Ctrl (ICFC)	MOPC-21	ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Fixation Buffer		ICC, ICFC
	Permeabilization Wash Buffer (10X)		ICC, ICFC, IHC
	Brefeldin A Solution (1,000X)		ICFC
	Monensin Solution (1,000X)		ICFC



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