

**PE Anti-Human CD4 (OKT4) Antibody**  
**Catalog # ATB10167****Specification**

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**PE Anti-Human CD4 (OKT4) Antibody - Product Information**

Application	FC
Isotype	Mouse IgG2b, kappa
Concentration	5 uL (0.06 ug)/test
Reactivity	Human
Formulation	10 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.09% Na <sub>3</sub> N, 0.1% gelatin, pH7.2
Host	Mouse

**PE Anti-Human CD4 (OKT4) Antibody - Additional Information**

Gene ID	920
Gene Name	CD4
<b>Alternative Name(s)</b>	
Leu-3, T4	

**Format**  
PE**Preparation**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

**Application Notes**

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10<sup>5</sup> to 1x10<sup>8</sup> cells.

**Storage Conditions**

2-8°C protected from light

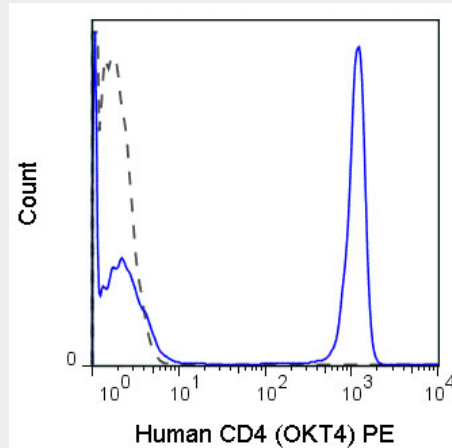
**PE Anti-Human CD4 (OKT4) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **PE Anti-Human CD4 (OKT4) Antibody - Images**



Human peripheral blood lymphocytes were stained with 5 uL (0.06 ug) PE Anti-Human CD4 (ATB10167) (solid line) or 0.06 ug PE Mouse IgG2b isotype control.

#### **PE Anti-Human CD4 (OKT4) Antibody - Background**

The OKT4 antibody reacts with human CD4, a 59 kDa protein which acts as a co-receptor for the T cell receptor (TCR) in its interaction with MHC Class II molecules on antigen-presenting cells. The extracellular domain of CD4 binds to the beta-2 domain of MHC Class II, while its cytoplasmic tail provides a binding site for the tyrosine kinase lck, facilitating the signaling cascade that initiates T cell activation. CD4, and co-receptors CCR5 and CXCR4, may also be utilized by HIV-1 to enter T cells. Human CD4 is typically expressed on thymocytes, some mature T cell populations such as Th17 and T regulatory (Treg) cells, as well as on dendritic cells. The OKT4 antibody is widely used as a phenotypic marker for CD4 expression. It is cross-reactive with CD4 in several non-human species, including Chimpanzee, Cynomolgus and Rhesus. This antibody recognizes a different epitope, and thus does not block binding of, the alternative Anti-Human CD4 antibody clone RPA-T4 (Reinherz EL, et al. 1979. Proc. Natl. Acad. Sci. 76:4061-4065)