

Pacific Blue™ anti-human CD4

Catalog # / Size: 2187145 / 100 tests
 2187120 / 100 µg
 2187115 / 25 µg

Clone: OKT4

Isotype: Mouse IgG2b, κ

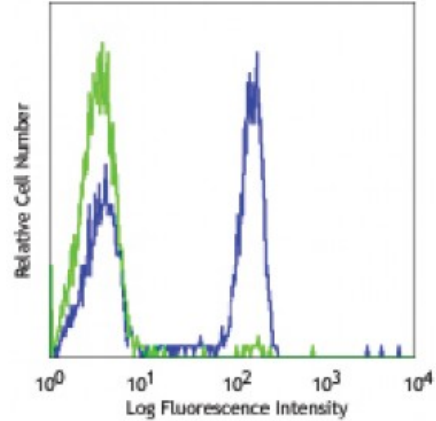
Immunogen: Human peripheral T cells

Reactivity: Human

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

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

Concentration: test size: lot-specific; microg sizes: 0.5 mg/ml



Human peripheral blood lymphocytes stained with OKT4 Pacific Blue™

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis.
For test size, the suggested use of this reagent for immunofluorescent staining is 5 µL per million cells or 5 µL per 100 µL of whole blood.
For microg sizes, the suggested use of this reagent for immunofluorescent staining is ≤2.0 µg per 10⁶ cells in 100 µL volume or 100 µL of whole blood.
 It is highly recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: The OKT4 antibody binds to the D3 domain of CD4 and does not block HIV binding. Additional reported applications (for the relevant formats) include: immunohistochemistry of frozen sections and blocking of T cell activation. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 317404).

- Application References:**
- Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
 - Reinherz EL, *et al.* 1979. *Proc. Natl. Acad. Sci.* 76:4061.
 - Kmieciak M, *et al.* 2009. *J. Transl. Med.* 7:89. (FC) [PubMed](#)
 - Cicin-Sain L, *et al.* 2010. *J. Immunol.* 184:6739. [PubMed](#)
 - Rosenzweig M, *et al.* 2001. *J. Med. Primatol.* 30:36.
 - Linder J, *et al.* 1987. *Am. J. Pathol.* 127:1.

7. Boche D, *et al.* 1999. *J. Neurovirol.* 5:232. (IHC)
8. Reinherz EL, *et al.* 1979. *Proc. Natl. Acad. Sci. USA.* 76:4061. (Immunogen)
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Description: CD4, also known as T4, is a 55 kD single-chain type I transmembrane glycoprotein expressed on most thymocytes, a subset of T cells, and monocytes/macrophages. CD4, a member of the Ig superfamily, recognizes antigens associated with MHC class II molecules and participates in cell-cell interactions, thymic differentiation, and signal transduction. CD4 acts as a primary receptor for HIV, binding to HIV gp120. CD4 has also been shown to interact with IL-16.

Antigen
References: 1. Center D, *et al.* 1996. *Immunol. Today* 17:476.
2. Gaubin M, *et al.* 1996. *Eur. J. Clin. Chem. Clin. Biochem.* 34:723.