

Pacific Blue™ anti-human CD4

Catalog # / Size: 317423 / 25 µg
317424 / 100 µg
317429 / 100 tests

Clone: OKT4

Isotype: Mouse IgG2b, κ

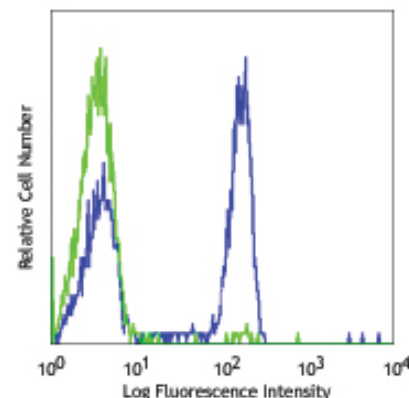
Reactivity: Human, **Cross-Reactivity:** Chimpanzee, Cynomolgus, Rhesus

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).
µg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: test size: lot-specific; µg sizes: 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.**



Human peripheral blood lymphocytes stained with OKT4 Pacific Blue™

Applications:

Applications: FC - Quality tested

Recommended Usage: This CD4 reagent is developed for immunofluorescent staining for 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 µg 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.

** Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

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. 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.
- Boche D, *et al.* 1999. *J. Neurovirol.* 5:232. (IHC)
- Tabb B, *et al.* 2012. *J Infect Dis.* PubMed.

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:

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

Related Products:	Product	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Pacific Blue™ Mouse IgG2b, κ Isotype Ctrl	MPC-11	FC, ICFC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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