Product Data Sheet

PerCP/Cy5.5 anti-human CD4

Catalog # / Size: 2187140 / 100 tests

2187135 / 25 tests

Clone: OKT4

Isotype: Mouse IgG2b, κ

Immunogen: Human peripheral T cells

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated

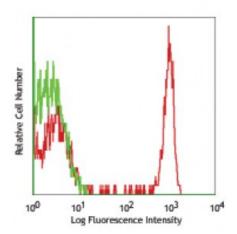
antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with OKT4 PerCP/Cy5.5

Applications:

Applications: Flow Cytometry

Recommended Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

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 $^{\text{TM}}$ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 317404).

Application References:

- 1. Knapp W, et al. 1989. Leucocyte Typing IV. Oxford University Press. New York.
- 2. Reinherz EL, et al. 1979. Proc. Natl. Acad. Sci. 76:4061.
- 3. Kmieciak M, *et al.* 2009. *J. Transl. Med.* 7:89. (FC) <u>PubMed</u> 4. Cicin-Sain L, *et al.* 2010. *J. Immunol.* 184:6739. <u>PubMed</u>
- 5. Rosenzweig M, et al. 2001. J. Med. Primatol. 30:36.
- 6. 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)

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.

References: 2. Gaubin M, et al. 1996. Eur. J. Clin. Chem. Clin. Biochem. 34:723.

1. Center D, et al. 1996. Immunol. Today 17:476.

Antigen