SONY

Product Data Sheet

APC/Cyanine7 anti-human CD4

Catalog # / Size: 2187250 / 100 µg
2187090 / 100 tests
2187085 / 25 tests

Clone: OKT4

Isotype: Mouse IgG2b, κ

Immunogen: Human peripheral T cells

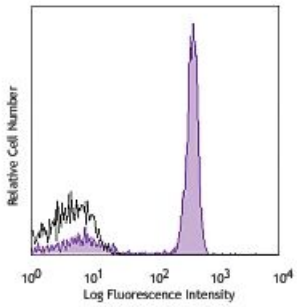
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography, and conjugated with APC/Cyanine7 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: HCDM listed

Concentration: Lot-specific



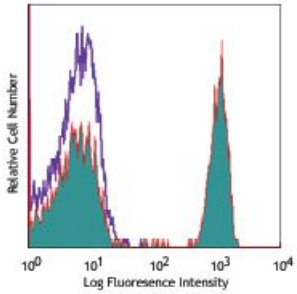
Human peripheral blood lymphocytes stained with OKT4 APC/Cy7

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. For flow cytometric staining using the µg size, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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).



Human peripheral blood lymphocytes stained with OKT4 Alexa Fluor® 647.

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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) PubMed
4. Cicin-Sain L, *et al.* 2010. *J. Immunol.* 184:6739. PubMed
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.

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.

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