## **Brilliant Violet 785™ anti-human CD4**

Catalog # / Size: 2187210 / 100 tests

2187205 / 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 Brilliant Violet 785™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 785™ and

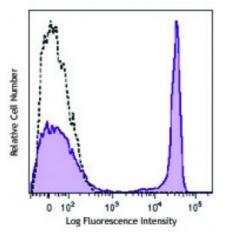
unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



Human peripheral lymphocytes were stained with CD4 (clone OKT4) Brilliant Violet 785™.

## **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.

Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 785™ is a trademark of Sirigen Group Ltd.

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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  $^{\rm m}$  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) 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** 

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

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