

**Brilliant Violet 650™ anti-human CD4**

**Catalog # / Size:** 2187180 / 100 tests  
2187175 / 25 tests

**Clone:** OKT4

**Isotype:** Mouse IgG2b, κ

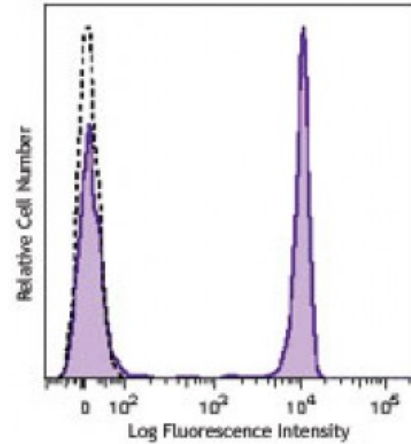
**Immunogen:** Human peripheral T cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.

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

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD4 (clone OKT4) Brilliant Violet 650™.

**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 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 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 650™ 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™ 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. Kmiecik 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)
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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.