

# Product Data Sheet

## Alexa Fluor® 488 anti-human CD4

**Catalog # / Size:** 317419 / 25 tests  
317420 / 100 tests

**Clone:** OKT4

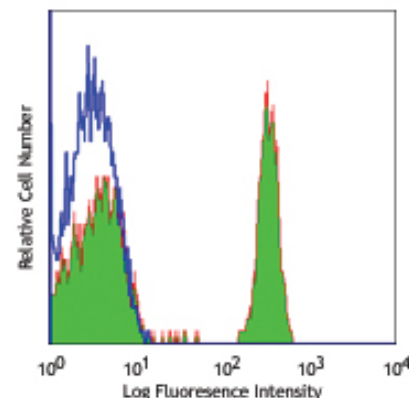
**Isotype:** Mouse IgG2b,  $\kappa$

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

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**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 Alexa Fluor® 488

## Applications:

**Applications:** FC - Quality tested

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

\* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 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/ $\mu$ g, Azide-Free, 0.2  $\mu$ m 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)

**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**

Cell Staining Buffer

RBC Lysis Buffer (10X)

Alexa Fluor® 488 Mouse IgG2b,  $\kappa$  Isotype Ctrl

Human TruStain FcX™ (Fc Receptor Blocking Solution)

### Clone

MPC-11

### Application

FC, ICC, ICFC

FC, ICFC

FC, ICFC

FC, ICC, ICFC



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