## **Product Data Sheet**

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## PerCP anti-human CD4

Catalog # / Size:	2102640 / 100 tests 2102635 / 25 tests	
Clone:	RPA-T4	
Isotype:	Mouse lgG1, κ	
<b>Reactivity:</b>	Human	Relative Cell Nu
Preparation:	The antibody was purified by affinity chromatography, and conjugated with PerCP under optimal conditions. The solution is free of unconjugated PerCP and unconjugated antibody.	
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).	10 <sup>0</sup> 10 <sup>1</sup> 10 <sup>2</sup> 10 <sup>3</sup> 10 <sup>4</sup> Log Fluoresence Intensity Human peripheral blood
Workshop Number:	IV T114	lymphocytes stained with RPA-T4 PerCP
<b>Concentration:</b>	Lot-specific	

## **Applications:**

**Applications:** Flow Cytometry

Recommended Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of Usage: 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 has a maximum absorption of 482 nm and a maximum emission of 675 nm.

The RPA-T4 antibody binds to the D1 domain of CD4 (CDR1 and CDR3 epitopes) Application and can block HIV gp120 binding and inhibit syncytia formation. Additional Notes: reported applications (for the relevant formats) include: immunohistochemistry of acetone-fixed frozen sections<sup>3,4,5</sup>, and blocking of T cell activation<sup>1,2</sup>. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. The LEAF<sup>™</sup> purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 300516).

1. Knapp W, et al. 1989. Leucocyte Typing IV. Oxford University Press. New York. Application **References:** (Activ) 2. Moir S, et al. 1999. J. Virol. 73:7972. (Activ) 3. Deng MC, et al. 1995. Circulation 91:1647. (IHC)

- 4. Friedman T, et al. 1999. J. Immunol. 162:5256. (IHC)
- 5. Mack CL, et al. 2004. Pediatr. Res. 56:79. (IHC)
- 6. Lan RY, et al. 2006. Hepatology 43:729.
- 7. Zenaro E, et al. 2009. J. Leukoc. Biol. 86:1393. (FC) PubMed
- 8. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

**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,

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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.