

## APC/Cy7 anti-human CD4

**Catalog # / Size:** 300517 / 25 tests  
300518 / 100 tests

**Clone:** RPA-T4

**Isotype:** Mouse IgG1,  $\kappa$

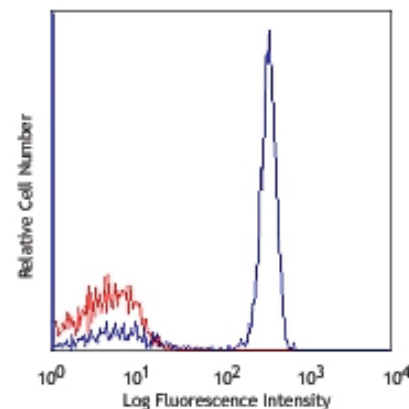
**Workshop Number:** IV T114

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

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

**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 RPA-T4 APC/Cy7

## Applications:

**Applications:** FC - Quality tested

**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  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** The RPA-T4 antibody binds to the D1 domain of CD4 (CDR1 and CDR3 epitopes) and can block HIV gp120 binding and inhibit syncytia formation. Additional reported applications (for the relevant formats) include: immunohistochemistry<sup>3,4,5</sup> of acetone-fixed frozen sections, and blocking of T cell activation<sup>1,2</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 300516).

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**Application References:**

- Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York. (Activ)
- Moir S, *et al.* 1999. *J. Virol.* 73:7972. (Activ)
- Deng MC, *et al.* 1995. *Circulation* 91:1647. (IHC)
- Friedman T, *et al.* 1999. *J. Immunol.* 162:5256. (IHC)
- Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
- Lan RY, *et al.* 2006. *Hepatology* 43:729.
- Zenaro E, *et al.* 2009. *J. Leukoc. Biol.* 86:1393. (FC) PubMed
- 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, 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	Clone	Application
	APC anti-human CD184 (CXCR4)	12G5	FC
	APC anti-human CD8a	HIT8a	FC
	APC/Cy7 anti-human CD8a	RPA-T8	FC
	APC anti-human CD3	UCHT1	FC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	APC anti-human CD184 (CXCR4)	4G10	FC
	APC/Cy7 anti-human CD25	BC96	FC
	APC/Cy7 anti-human CD3	HIT3a	FC
	APC/Cy7 Mouse IgG1, $\kappa$ Isotype Ctrl	MOPC-21	FC, ICFC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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