

PE/Cy7 anti-human CD4

Catalog # / Size: 300511 / 25 tests
300512 / 100 tests

Clone: RPA-T4

Isotype: Mouse IgG1, κ

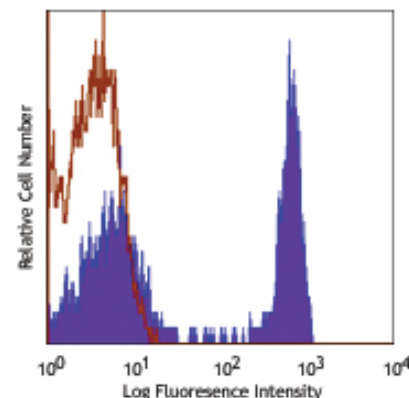
Workshop Number: IV T114

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

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/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 CD4 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 PE/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 μ l to 5 μ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 μ l staining volume or per 100 μ 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 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^{3,4,5} of acetone-fixed frozen sections, and blocking of T cell activation^{1,2}. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 300516).

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.

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)
- Chung BH, *et al.* 2012. *PLoS One.* 7:e42011. PubMed.

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
PE/Cy5 anti-human CD184 (CXCR4)	12G5	FC
PE/Cy7 anti-human CD8a	RPA-T8	FC
PE/Cy5 anti-human CD3	UCHT1	FC
PE/Cy7 Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
PE anti-human CD184 (CXCR4)	4G10	FC
PE/Cy7 anti-human CD25	BC96	FC
PE/Cy7 anti-human CD3	HIT3a	FC
PE/Cy7 anti-human CD8a	HIT8a	FC

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