

CD4 Monoclonal Antibody (RPA-T4), PE-Cyanine7, eBioscience™

| Product Details | |
|-----------------------------|--|
| Size | 100 Tests |
| Species Reactivity | Human |
| Published Species | Artificial Control, Human, Mouse |
| Host/Isotype | Mouse / IgG1, kappa |
| Recommended Isotype Control | Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE-Cyanine7, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | RPA-T4 |
| Conjugate | PE-Cyanine7 |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA |
| Contains | 0.09% sodium azide |
| Storage Conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_1659695 |

| Applications | Tested Dilution | Publications |
|-----------------------|--------------------|-----------------|
| Flow Cytometry (Flow) | 5 µL (0.5 µg)/test | 48 Publications |

Product Specific Information

Description: The RPA-T4 monoclonal antibody reacts with human CD4, a 59 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells (T-helper cells) and in low levels on monocytes. CD4 is a receptor for the human immunodeficiency virus (HIV). RPA-T4 blocks HIV binding and mixed lymphocyte reaction. The RPA-T4 antibody recognizes a different epitope than the OKT4 monoclonal antibody, and these antibodies do not cross-block binding to each other's respective epitopes.

Applications Reported: The RPA-T4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RPA-T4 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 4 µL (1 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

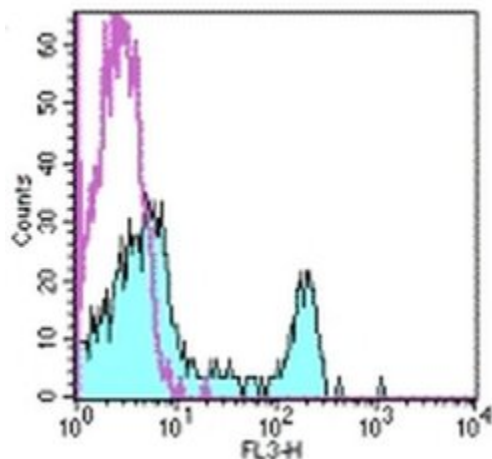
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (RPA-T4), PE-Cyanine7, eBioscience™



CD4 Antibody (25-0049-42) in Flow

Staining of normal human peripheral blood cells with staining buffer (autofluorescence) (open histogram) or Anti-Human CD4 PE-Cyanine7 (filled histogram). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

48 References

Flow Cytometry (48)

Experimental and therapeutic medicine

Equilibrium of Treg/Th17 cells of peripheral blood in syphilitic patients with sero-resistance.

"Published figure using CD4 monoclonal antibody (Product # 25-0049-42) in Flow Cytometry"

Authors: Zhao J, Ma J, Zhang X, Li Q, Yang X

Species

Not Applicable

Dilution

Not Cited

Year

2016

Journal of immunology (Baltimore, Md. : 1950)

Decidual T Cells Exhibit a Highly Differentiated Phenotype and Demonstrate Potential Fetal Specificity and a Strong Transcriptional Response to IFN.

"25-0049 was used in Flow cytometry/Cell sorting to investigate the specificity and regulation of CD4+ and CD8+ T cells obtained from human third trimester decidua and demonstrated that decidual CD4+ and CD8+ T cells exhibit a highly differentiated effector memory phenotype in comparison with peripheral blood."

Authors: Powell RM, Lissauer D, Tamblin J, Beggs A, Cox P, Moss P, Kilby MD

Species

Human

Dilution

Not Cited

Year

2017

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