

# CD4 Monoclonal Antibody (RPA-T4), PE-eFluor 610, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Artificial Control, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE-eFluor 610, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	PE-eFluor® 610
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574522

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	28 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:** This 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 5 µL (0.125 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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

PE-eFluor® 610 can be excited with laser lines from 488-561 nm and emits at 607 nm. We recommend using a 610/20 band pass filter (equivalent to PE-Texas Red®). Please make sure that your instrument is capable of detecting this fluorochrome.

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

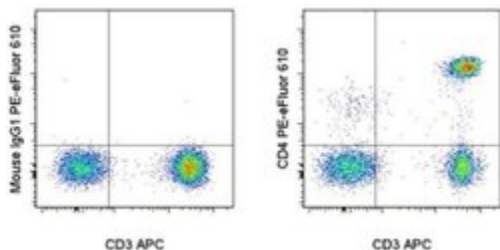
**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency

/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 607 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-eFluor 610, eBioscience™



### CD4 Antibody (61-0049-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 APC (Product # 17-0036-42) and Mouse IgG1 K Isotype Control PE-eFluor® 610 (Product # 61-4714-82) (left) or Anti-Human CD4 PE-eFluor® 610 (right). Cells in the lymphocyte gate were used for analysis.

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

## 28 References

### Flow Cytometry (28)

Acta Cardiologica Sinica

#### The Effects of High Mobility Group Box-1 Protein on Peripheral Treg /Th17 Balance in Patients with Atherosclerosis.

"Published figure using CD4 monoclonal antibody (Product # 61-0049-42) in Flow Cytometry"

Authors: Ding JW,Zhou T,Zheng XX,Wang XA,Tong XH,Luo CY,Zhang ZQ,Yu B

**Species**

Artificial Control

**Dilution**

Not Cited

**Year**

2018

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 # 61-0049-42) in Flow Cytometry"

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

**Species**

Not Applicable

**Dilution**

Not Cited

**Year**

2016

[View more Flow references on thermofisher.com](#)

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