

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

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Mouse, 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
Excitation/Emission Max	565/606 nm
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	42 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 10^5 to 10^8 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.

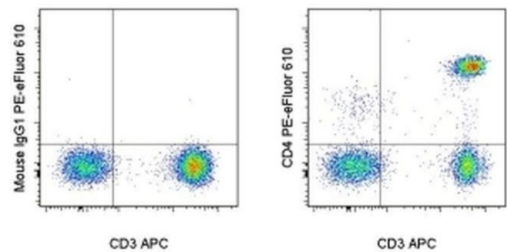
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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

42 References

Flow Cytometry (42)

JCI insight	Year 2023
Rapamycin improves Graves' orbitopathy by suppressing CD4+ cytotoxic T lymphocytes.	
"Published figure using CD4 monoclonal antibody (Product # 61-0049-42) in Flow Cytometry"	
Authors: Zhang M,Chong KK,Chen ZY,Guo H,Liu YF,Kang YY,Li YJ,Shi TT,Lai KK,He MQ,Ye K,Kahaly GJ,Shi BY,Wang Y	
Frontiers in immunology	Year 2023
Single-cell RNA sequencing reveals the molecular features of peripheral blood immune cells in children, adults and centenarians.	
"Published figure using CD4 monoclonal antibody (Product # 61-0049-42) in Flow Cytometry"	
Authors: Zhong J,Ding R,Jiang H,Li L,Wan J,Feng X,Chen M,Peng L,Li X,Lin J,Yang H,Wang M,Li Q,Chen Q	

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