

Primary Antibodies (/us/en/home/life-science/antibodies/primary-antibodies.html) ›  
CD4 Antibodies (/antibody/primary/target/cd4)

Invitrogen

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

📄 52 Published Figures

🔖 42 References

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📄 Datasheet (/order/genome-database/dataSheetPdf?

producttype=antibody&productsubtype=antibody\_primary&productId=61-0049-42&version=Local)

Catalog # 61-0049-42

100 Tests ▾

CAD 465.00 ⓘ

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Quantity

1

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productType=Antibody&primarySiteId=US&productId=61-0049-42&productDescription=CD4 Monoclonal Antibody (RPA-T4), PE-eFluor&trade; 610, eBioscience&version=Local)

📄 **Protocols**  
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✔ Performance Guarantee

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Antibody Testing Data (1)

Published Figures (52)

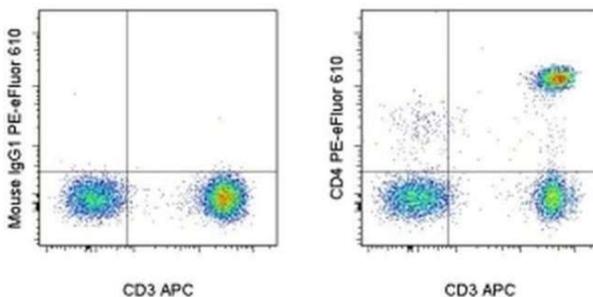


FIGURE: 1 / 53

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

Staining of normal human peripheral blood cells with Anti-Human CD3 APC (Product # 17-0036-42 (/order/genome-database/details/antibody/17-0036-42)) and Mouse IgG1 K Isotype Control PE-eFluor® 610 (Product # 61-4714-82 (/order/genome-



(/ca/en/home.html)

database/details/antibody/61-4714-82)) (left) or Anti-Human CD4 PE-eFluor® 610 (right). Cells in the lymphocyte gate were used for analysis. [View more](#)



## Product Details

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	<b>View 42 publications</b>

<b>Product Specifications</b>
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Species Reactivity	Human	
	Human, Mouse	 
(/ca/en/home.html)		
Host/Isotype	Mouse / IgG1, kappa	
Recommended Isotype Control	<b>Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE-eFluor™ 610, eBioscience™</b> ( <a href="http://www.thermofisher.com/antibody/product/61-4714-82">//www.thermofisher.com/antibody/product/61-4714-82</a> )	
Class	Monoclonal	
Type	Antibody	
Clone	RPA-T4	
Conjugate	PE-eFluor™ 610	<a href="#">View additional formats</a> ▾
Excitation/Emission Max	565/606 nm	<a href="#">View spectra (/order/fluorescence-spectraviewer?SID=srch-svtool&amp;UID=pe-ef610)</a>
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!	
Shipping conditions	Ambient (domestic); Wet ice (international)	
RRID ⓘ	AB_2574522	

### 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

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epitope than the OKT4 monoclonal antibody, and do not cross-block bir'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  $\mu\text{L}$  (0.125  $\mu\text{g}$ ) per test. A test is defined as the amount ( $\mu\text{g}$ ) of antibody that will stain a cell sample in a final volume of 100  $\mu\text{L}$ . 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 (Product # 00-8222 (<https://www.thermofisher.com/order/catalog/product/00-8222-49>)) (100  $\mu\text{L}$  of cell sample + 100  $\mu\text{L}$  of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333 (<https://www.thermofisher.com/order/catalog/product/00-5333-54>)) 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.

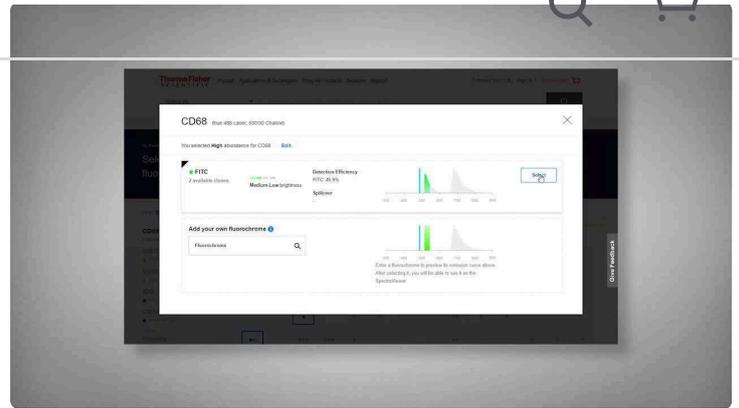
**Excitation:** 488-561 nm; **Emission:** 607 nm;  
**Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

**Filtration:** 0.2  $\mu\text{m}$  post-manufacturing filtered.

### Target Information

The CD4 antigen is involved in the recognition of MHC class II molecules and is a co-receptor for HIV. CD4 is primarily expressed in a subset of T-lymphocytes, also referred to as T helper cells, but may also be expressed by other cells

(<https://www.thermofisher.com/us/en/home/life-science/cell-analysis/flow-cytometry/antibodies-for-flow-cytometry/flow-cytometry-panel-builder.html>)



### How to use the Panel Builder

Watch the video to learn how to use the Invitrogen Flow Cytometry Panel Builder to build your next flow cytometry panel in 5 easy steps.

in the immune system, such as monocytes, macrophages, and dendritic cells. At the tissue level, CD4 expression may be detected in thymus, spleen, tonsils, and spleen, and also in specific regions of the brain, gut, and other non-lymphoid tissues. CD4 functions to initiate or augment the early phase of T-cell activation through its association with the T-cell receptor complex and protein tyrosine kinase, Lck. It may also function as an important mediator of direct neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcripts have been identified in this gene [RefSeq, July 2017].

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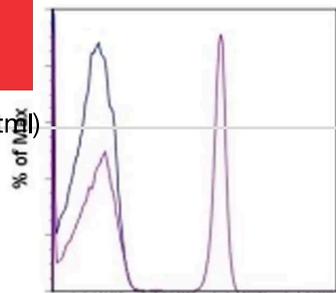
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CD4 Purified/Anti-Mouse IgG1 FITC

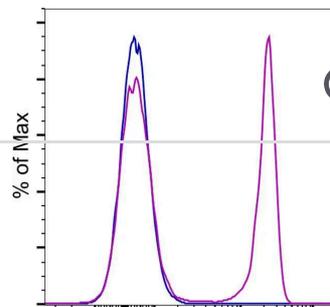
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## Bioinformatics

**Protein Aliases:** CD4; CD4 antigen (p55); CD4 antigen p55; CD4 receptor; cd4a; fCD4; Leu-3; T-cell surface antigen T4/Leu-3; T-cell surface glycoprotein CD4

**Gene Aliases:** CD4; CD4mut

**UniProt ID: (Human) P01730**  
(<http://www.uniprot.org/uniprot/P01730>)

**Entrez Gene ID: (Human) 920**  
(<http://www.ncbi.nlm.nih.gov/gene?term=920>)

Function(s)



Process(es)



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(<https://www.thermofisher.com/us/en/home/life-science/antibodies/antibody-performance-guarantee.html>)



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