

# CD4 Monoclonal Antibody (RPA-T4), Alexa Fluor™ 532, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Alexa Fluor™ 532, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	Alexa Fluor™ 532
Excitation/Emission Max	534/553 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_2802361

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	1:25	2 Publications
Flow Cytometry (Flow)	5 µL (0.125 µg) /test	13 Publications
Neutralization (Neu)	-	1 Publication

## 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.

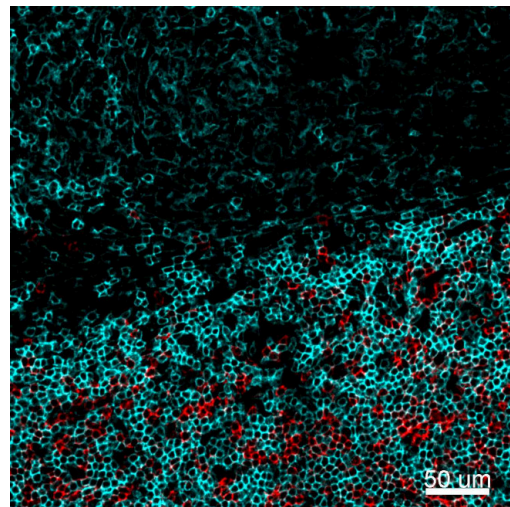
Applications Reported: This RPA-T4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RPA-T4 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may 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.

Alexa Fluor 532 is excited with the Green laser (532 nm) and emits at 561 nm. This cannot be used with the Yellow-Green laser (561 nm). We recommend using a 560/14 band pass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

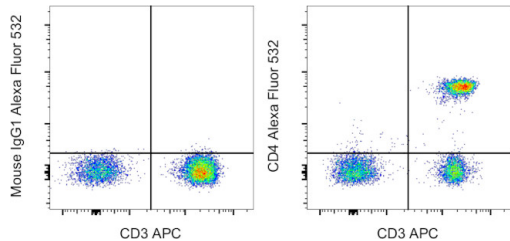
Excitation: 532 nm; Emission: 561 nm; Laser: Green Laser

Product Images For CD4 Monoclonal Antibody (RPA-T4), Alexa Fluor™ 532, eBioscience™



CD4 Antibody (58-0049-42) in IHC

Confocal image of human lymph node imaged using IBEX (Refs: <https://www.pnas.org/doi/10.1073/pnas.2018488117>; <https://www.nature.com/articles/s41596-021-00644-9>). CD4+ T cells and macrophages were labeled with CD4 Monoclonal Antibody (RPA-T4), Alexa Fluor™ 532, eBioscience™ (Product # 58-0049-42, 1:25 dilution) (cyan). CD8 T cells (red) were detected with a monoclonal antibody (clone SK1). Tissues were prepared using ~1% (vol/vol) formaldehyde and a detergent. Following fixation, samples are immersed in 30% (wt/vol) sucrose for cryoprotection. Images are courtesy of Drs. Andrea J. Radtke and Ronald N. Germain of the Center for Advanced Tissue Imaging (CAT-I) in the National Institute of Allergy and Infectious Diseases (NIAID, NIH). See ([https://ibeximagingcommunity.github.io/ibex\\_imaging\\_knowledge\\_base/](https://ibeximagingcommunity.github.io/ibex_imaging_knowledge_base/)) for additional community-validated antibodies compatible with IBEX.



CD4 Antibody (58-0049-42) in Flow

Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, APC (Product # 17-0038-42) and Mouse IgG1 kappa Isotype Control, Alexa Fluor 532 (Product # 58-4714-80) (left) or CD4 Monoclonal Antibody, Alexa Fluor 532 (right). Cells in the lymphocyte gate were used for analysis.

View more figures on [thermofisher.com](https://thermofisher.com)

Immunohistochemistry (2)

Cells	Year 2022
<b>Induced Human Regulatory T Cells Express the Glucagon-like Peptide-1 Receptor.</b>	
"Published figure using CD4 monoclonal antibody (Product # 58-0049-42) in Immunohistochemistry"	
Authors: Rode AKO,Buus TB,Mraz V,Al-Jaberi FAH,Lopez DV,Ford SL,Hennen S,Eliassen IP,Klewe IV,Gharehdaghi L, Dragan A,Rosenkilde MM,Woetmann A,Skov L,Ødum N,Bonefeld CM,Kongsbak-Wismann M,Geisler C	

Flow Cytometry (13)

JCI insight	Year 2023
<b>Rapamycin improves Graves' orbitopathy by suppressing CD4+ cytotoxic T lymphocytes.</b>	
"Published figure using CD4 monoclonal antibody (Product # 58-0049-42) 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
<b>Single-cell RNA sequencing reveals the molecular features of peripheral blood immune cells in children, adults and centenarians.</b>	
"Published figure using CD4 monoclonal antibody (Product # 58-0049-42) 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	

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

More applications with references on thermofisher.com

Neu (1)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.