

# CD4 Monoclonal Antibody (RPA-T4), FITC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	FITC
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_1659694

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	5 µL (1 µg)/test	39 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.

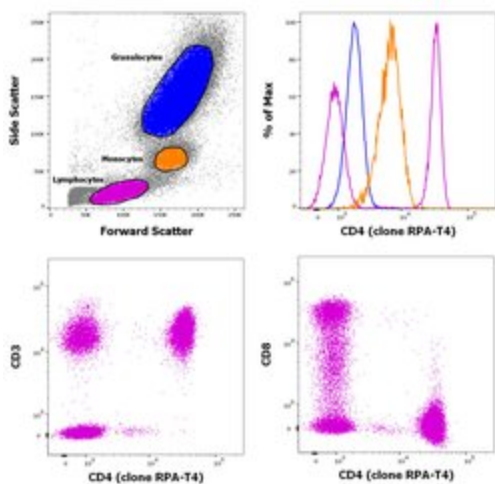
**Applications Reported:** This RPA-T4 antibody has been reported for use in flow cytometric analysis.

**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 (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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

**Excitation:** 488 nm; **Emission:** 520 nm; **Laser:** Blue Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.

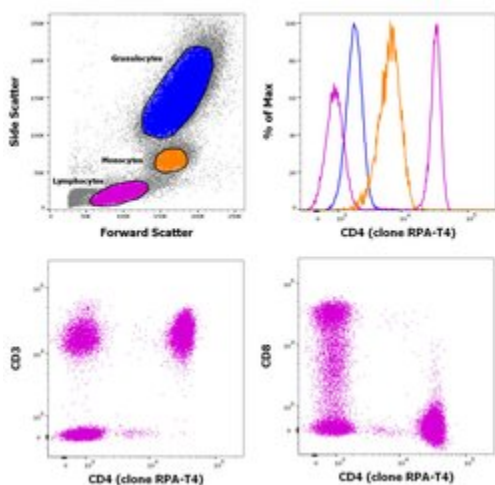
## Advanced Verification Data



### CD4 Antibody (11-0049-42)

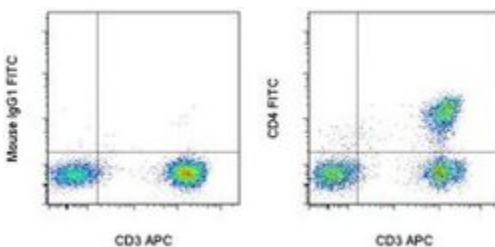
Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD3 APC, CD8 PerCP and CD4 FITC. As expected based on known relative expression patterns, CD4 clone RPA-T4 stains a subset of lymphocytes (pink) and monocytes (orange), but not granulocytes (blue). Relative expression validation info.

## Product Images For CD4 Monoclonal Antibody (RPA-T4), FITC, eBioscience™



### CD4 Antibody (11-0049-42) in Flow

Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD3 APC, CD8 PerCP and CD4 FITC. As expected based on known relative expression patterns, CD4 clone RPA-T4 stains a subset of lymphocytes (pink) and monocytes (orange), but not granulocytes (blue).



### CD4 Antibody (11-0049-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 APC (Product # 17-0036-42) and Mouse IgG1 K Isotype Control FITC (Product # 11-4714-42) (left) or Anti-Human CD4 FITC (right). Cells in the lymphocyte gate were used for analysis.

## Immunohistochemistry (1)

Journal of immunology (Baltimore, Md. : 1950)

### Lymphotoxin signals from positively selected thymocytes regulate the terminal differentiation of medullary thymic epithelial cells.

"11-0049 was used in Immunofluorescence to explore the mechanisms behind Aire(+) medullary thymic epithelial cell development."

Authors: White AJ,Nakamura K,Jenkinson WE,Saini M,Sinclair C,Seddon B,Narendran P,Pfeffer K,Nitta T,Takahama Y, Caamano JH,Lane PJ,Jenkinson EJ,Anderson G

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2010

## Flow Cytometry (39)

Allergy, asthma, and clinical immunology : official journal of the Canadian Society of Allergy and Clinical Immunology

### Taurine promotes the production of CD4<sup>+</sup>CD25<sup>+</sup>FOXP3<sup>+</sup> Treg cells through regulating IL-35/STAT1 pathway in a mouse allergic rhinitis model.

"11-0049-42 was used in Flow Cytometry to show that the restoration of Treg populations by taurine normalizes the inflammatory response, reduces AR symptomology, and reduces histopathologic signs of AR."

Authors: Zhou J,Lu Y,Wu W,Feng Y

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2021

Frontiers in immunology

### Th2 Biased Immunity With Altered B Cell Profiles in Circulation of Patients With Sporotrichosis Caused by *Sporothrix globosa*.

"11-0049 was used in Flow cytometry/Cell sorting to shed light on the potential involvement of peripheral T and B cell immunity against this mycotic infection."

Authors: Zu J,Yao L,Song Y,Cui Y,Guan M,Chen R,Zhen Y,Li S

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2021

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