

# CD4 Monoclonal Antibody (RPA-T4), Super Bright™ 600, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	Super Bright™ 600
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2802424

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	3 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-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.5 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.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

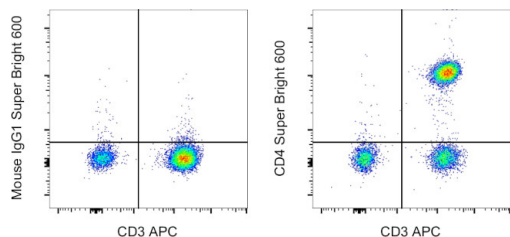
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 2-8°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorochrome performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD4 Monoclonal Antibody (RPA-T4), Super Bright™ 600, eBioscience™



### CD4 Antibody (63-0049-41) in Flow

Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, APC (Product # 17-0038-42) and Mouse IgG1 kappa Isotype Control, Super Bright 600 (Product # 63-4714-82) (left) or CD4 Monoclonal Antibody, Super Bright 600 (right). Cells in the lymphocyte gate were used for analysis.

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

## 5 References

### Immunohistochemistry (1)

JCI insight

#### CXCL13-producing TFH cells link immune suppression and adaptive memory in human breast cancer.

"Published figure using CD4 monoclonal antibody (Product # 63-0049-42) in Immunohistochemistry"

Authors: Gu-Trantien C, Migliori E, Buisseret L, de Wind A, Brohée S, Garaud S, Noël G, Dang Chi VL, Lodewyckx JN, Naveaux C, Duvallier H, Goriely S, Larsimont D, Willard-Gallo K

Year  
2017

### Flow Cytometry (3)

Cancers

#### Murlentamab, a Low Fucosylated Anti-Müllerian Hormone Type II Receptor (AMHRII) Antibody, Exhibits Anti-Tumor Activity through Tumor-Associated Macrophage Reprogramming and T Cell Activation.

"Published figure using CD4 monoclonal antibody (Product # 63-0049-42) in Flow Cytometry"

Authors: Prat M, Salon M, Allain T, Dubreuil O, Noël G, Preisser L, Jean B, Cassard L, Lemée F, Tabah-Fish I, Pipy B, Jeannin P, Prost JF, Barret JM, Coste A

Year  
2021

Journal of Cancer

#### HDAC Inhibitor, CG-745, Enhances the Anti-Cancer Effect of Anti-PD-1 Immune Checkpoint Inhibitor by Modulation of the Immune Microenvironment.

"Published figure using CD4 monoclonal antibody (Product # 63-0049-42) in Flow Cytometry"

Authors: Kim YD, Park SM, Ha HC, Lee AR, Won H, Cha H, Cho S, Cho JM

Year  
2020

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

### Neutralization (1)

Frontiers in immunology

#### Cytoplasmic Citrate Flux Modulates the Immune Stimulatory NKG2D Ligand MICA in Cancer Cells.

"Published figure using CD4 monoclonal antibody (Product # 63-0049-42) in Neutralization"

Authors: Møller SH, Mellergaard M, Madsen M, Bermejo AV, Jepsen SD, Hansen MH, Høgh RI, Aldana BI, Desler C, Rasmussen LJ, Sustarsic EG, Gerhart-Hines Z, Daskalaki E, Wheelock CE, Hiron TK, Lin D, O'Callaghan CA, Wandall HH, Andresen L, Skov S

Year  
2021

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