

# CD4 Monoclonal Antibody (RPA-T4), Super Bright™ 645, 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™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
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_2734978

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	12 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 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 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.

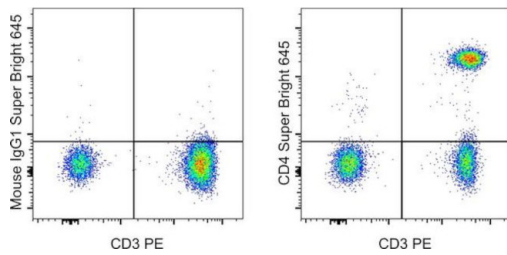
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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: 405 nm; Emission: 645 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™ 645, eBioscience™



### CD4 Antibody (64-0049-41) in Flow

Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, PE (Product # 12-0036-42) and Mouse IgG1 kappa Isotype Control, Super Bright 645 (Product # 64-4714-82) (left) or CD4 Monoclonal Antibody, Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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

## 15 References

### Immunohistochemistry (2)

Cells

#### Induced Human Regulatory T Cells Express the Glucagon-like Peptide-1 Receptor.

"Published figure using CD4 monoclonal antibody (Product # 64-0049-42) 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

Year  
2022

JCI insight

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

"Published figure using CD4 monoclonal antibody (Product # 64-0049-42) 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,Duvillier H,Goriely S,Larsimont D,Willard-Gallo K

Year  
2017

### Flow Cytometry (12)

JCI insight

#### Rapamycin improves Graves' orbitopathy by suppressing CD4+ cytotoxic T lymphocytes.

"Published figure using CD4 monoclonal antibody (Product # 64-0049-42) 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

Year  
2023

Frontiers in immunology

#### 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 # 64-0049-42) 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

Year  
2023

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

### More applications with references on thermofisher.com

## Neu (1)

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