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

Product Details	
Size	100 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
Excitation/Emission Max	414/601 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_2802425

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 10^5 to 10^8 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.

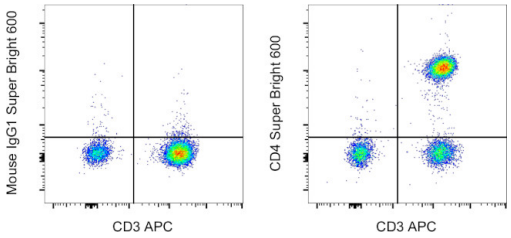
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL 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 (63-0049-42) in Flow
Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, APC (Product # 17-0038-42) and Mouse IgG1 kappa Isotype Control, 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

15 References

Immunohistochemistry (2)

Cells

Year
2022

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

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

Authors: Rode AKO,Buus TB,Mraz V,Al-Jaberi FAH,Lopez DV,Ford SL,Hennen S,Eliasen IP,Klewe IV,Gharehdaghi L, Dragan A,Rosenkilde MM,Woetmann A,Skov L,Ødum N,Bonefeld CM,Kongsbak-Wismann M,Geisler C

JCI insight

Year
2017

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,Duvillier H,Goriely S,Larsimont D,Willard-Gallo K

Flow Cytometry (12)

JCI insight

Year
2023

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

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

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 # 63-0049-42) 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)

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