

# CD45 Monoclonal Antibody (2D1), 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	2D1
Conjugate	Super Bright™ 600
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2662464

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/Test	6 Publications

## Product Specific Information

The 2D1 monoclonal antibody reacts with all isoforms of human CD45, also known as Leukocyte Common Antigen (LCA). CD45 is expressed by all hematopoietic cells excluding circulating erythrocytes and platelets. The cytoplasmic portion of CD45 has tyrosine phosphatase enzymatic activity and plays an important role in activation of lymphocytes.

This 2D1 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.25 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.

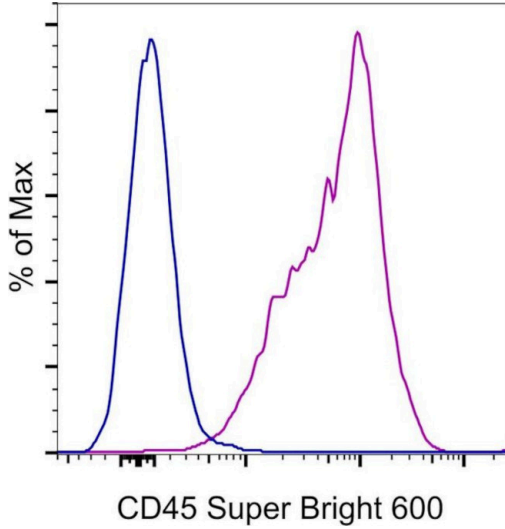
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 L of cell sample + 100 L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 2-8°C with minimal impact on brightness and FRET efficiency

/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 CD45 Monoclonal Antibody (2D1), Super Bright™ 600, eBioscience™



#### CD45 Antibody (63-9459-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control Super Bright 600 (Product # 63-4714-82) (blue histogram) or Anti-Human CD45 Super Bright 600 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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

### Flow Cytometry (6)

#### Pathogens & immunity

#### Plasma Extracellular Vesicle Subtypes May be Useful as Potential Biomarkers of Immune Activation in People With HIV.

"Published figure using CD45 monoclonal antibody (Product # 63-9459-42) in Flow Cytometry"

Authors: Bazié WW, Boucher J, Vitry J, Goyer B, Routy JP, Tremblay C, Trottier S, Jenabian MA, Provost P, Alary M, Gilbert C

Year  
2022

#### Bioengineered

#### VAP-PLGA microspheres (VAP-PLGA) promote adipose-derived stem cells (ADSCs)-induced wound healing in chronic skin ulcers in mice via PI3K/Akt/HIF-1 pathway.

"Published figure using CD45 monoclonal antibody (Product # 63-9459-42) in Flow Cytometry"

Authors: Jiang W, Zhang J, Zhang X, Fan C, Huang J

Year  
2021

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

### More applications with references on thermofisher.com

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