

CD25 Monoclonal Antibody (CD25-4E3), Super Bright™ 645, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Non-human primate
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	CD25-4E3
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_2762628

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	4 Publications

Product Specific Information

Description: This CD25-4E3 monoclonal antibody reacts to human CD25, which is also known as the low-affinity interleukin (IL)-2 receptor alpha. CD25 is expressed on activated T cells (including a subset of regulatory T cells), B cells, and macrophages. This receptor subunit associates with CD122, the IL-2 receptor beta chain, and CD132, the common gamma chain, to form the high-affinity IL-2 receptor. IL-2 receptor signaling has been linked to cell proliferation and survival in lymphocytes. CD25 is a marker for Hodgkin's disease, and has been associated with such autoimmune diseases as Type I diabetes.

This monoclonal antibody is cross-reactive to rhesus monkey.

Applications Reported: This CD25-4E3 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This CD25-4E3 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may 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 10⁵ to 10⁸ 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. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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.

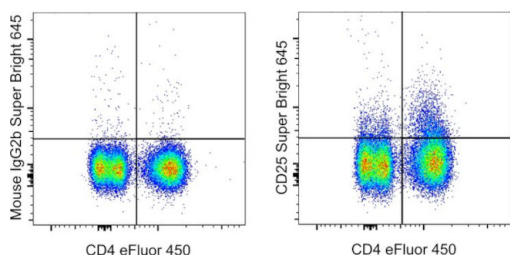
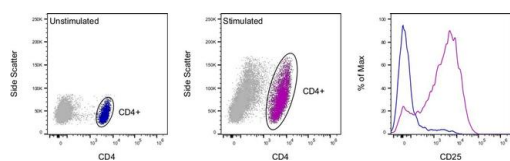
Excitation: 405 nm; **Emission:** 645 nm; **Laser:** Violet Laser

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

Product Images For CD25 Monoclonal Antibody (CD25-4E3), Super Bright™ 645, eBioscience™

CD25 Antibody (64-0257-42)

Staining of stimulated human peripheral blood cells. As expected based on known expression patterns, CD25 clone CD25-4E3 staining is significantly increased in CD4+ T cells after stimulation. Details: Normal human peripheral blood cells were unstimulated (blue histogram) or stimulated for 3 days with Concanavalin A (Con A) Solution (500X) and Lipopolysaccharide (LPS) Solution (500X) (purple histogram). Cells were stained with Fixable Viability Dye eFluor 780, CD4 (clone SK3) and CD25 (clone CD25-4E3). Viable cells in the CD4+ gate were used for analysis. {TM}



CD25 Antibody (64-0257-42) in Flow

Normal human peripheral blood cells were stained with CD4 Monoclonal Antibody, eFluor 450 (Product # 48-0049-42) and Mouse IgG2b kappa Isotype Control, Super Bright 645 (Product # 64-4732-82) (left) or CD25 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)

4 References

Flow Cytometry (4)

Journal of immunology research

Increased TNF- Initiates Cytoplasmic Vacuolization in Whole Blood Coculture with Dengue Virus.

Year
2021

"Published figure using CD25 monoclonal antibody (Product # 64-0257-42) in Flow Cytometry"

Authors: Satria RD,Huang TW,Jhan MK,Shen TJ,Tseng PC,Wang YT,Yang ZY,Hsing CH,Lin CF

Journal of the American Heart Association

Remote Limb Ischemic Postconditioning Protects Against Ischemic Stroke by Promoting Regulatory T Cells Thriving.

Year
2021

"Published figure using CD25 monoclonal antibody (Product # 64-0257-42) in Flow Cytometry"

Authors: Yu HH,Ma XT,Ma X,Chen M,Chu YH,Wu LJ,Wang W,Qin C,Tian DS

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

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