

# CD4 Monoclonal Antibody (SK3 (SK-3)), Super Bright™ 645, 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™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	SK3 (SK-3)
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_2662347

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	2 Publications

## Product Specific Information

**Description:** The SK3 monoclonal antibody reacts with human CD4, a 59-kDa cell surface receptor expressed by a majority of thymocytes, a subpopulation of mature T helper cells, and, in low levels, monocytes. CD4 is a receptor for the human immunodeficiency virus (HIV). SK3 blocks HIV binding and mixed lymphocyte reaction. The SK3 and RPA-T4 monoclonal antibodies do not cross-block binding, suggesting recognition of distinct epitopes.

**Applications Reported:** This SK3 (SK-3) antibody has been reported for use in flow cytometric analysis

**Applications Tested:** This SK3 (SK-3) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.125 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.

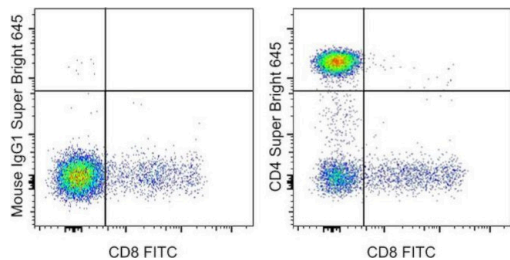
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (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 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 (SK3 (SK-3)), Super Bright™ 645, eBioscience™



**CD4 Antibody (64-0047-42) in Flow**  
Staining of normal human peripheral blood cells with Anti-Human CD8a FITC (Product # 11-0088-42) and Mouse IgG1 K Isotype Control Super Bright 645 (Product # 64-4714-82) (left) or Anti-Human CD4 Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

2 References

Flow Cytometry (2)

Experimental hematology & oncology	Year 2022
<b>Interleukin-6-knockdown of chimeric antigen receptor-modified T cells significantly reduces IL-6 release from monocytes.</b>	
"Published figure using CD4 monoclonal antibody (Product # 64-0047-42) in Flow Cytometry"	
Authors: Kang L,Tang X,Zhang J,Li M,Xu N,Qi W,Tan J,Lou X,Yu Z,Sun J,Wang Z,Dai H,Chen J,Lin G,Wu D,Yu L	
iScience	Year 2021
<b>SPARC regulation of PMN clearance protects from pristane-induced lupus and rheumatoid arthritis.</b>	
"Published figure using CD4 monoclonal antibody (Product # 64-0047-42) in Flow Cytometry"	
Authors: Sangaletti S,Botti L,Gulino A,Lecis D,Bassani B,Portararo P,Milani M,Cancila V,De Cecco L,Dugo M,Tripodo C, Colombo MP	

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