

# CD4 Monoclonal Antibody (SK3 (SK-3)), Super Bright™ 780, 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™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	SK3 (SK-3)
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 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_2744895

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 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 at low levels on 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 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This SK3 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.06 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 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 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.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color

stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

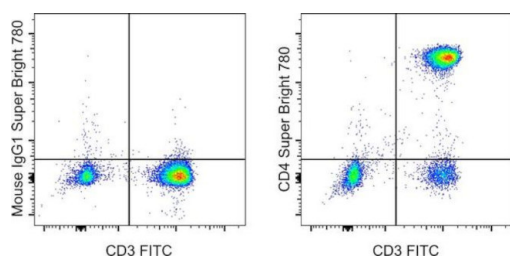
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer (Product # 00-8222) (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:** 780 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™ 780, eBioscience™



### CD4 Antibody (78-0047-41) in Flow

Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, FITC (Product # 11-0038-82) and Mouse IgG1 kappa Isotype Control, Super Bright 780 (Product # 78-4714-82) (left) or CD4 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

## 2 References

### Flow Cytometry (2)

Experimental hematology & oncology

#### Interleukin-6-knockdown of chimeric antigen receptor-modified T cells significantly reduces IL-6 release from monocytes.

"Published figure using CD4 monoclonal antibody (Product # 78-0047-42) 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

Year  
2022

iScience

#### SPARC regulation of PMN clearance protects from pristane-induced lupus and rheumatoid arthritis.

"Published figure using CD4 monoclonal antibody (Product # 78-0047-42) 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

Year  
2021

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