

# CD19 Monoclonal Antibody (SJ25C1), 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	SJ25C1
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_2734907

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	6 Publications

## Product Specific Information

**Description:** The SJ25C1 monoclonal antibody reacts with human CD19, a 95 kDa transmembrane glycoprotein. CD19 is expressed by B cells during all stages of development excluding the terminally differentiated plasma cells. Follicular dendritic cells also express this molecule. CD19, along with CD21, CD81, Leu13, and MHC class II, form a multimolecular complex that associates with the BCR. Signaling through CD19 induces tyrosine phosphorylation, calcium flux, and proliferation of B cells. The SJ25C1 antibody and the HIB19 monoclonal antibody recognize overlapping epitopes.

**Applications Reported:** This SJ25C1 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This SJ25C1 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.125 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. 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.

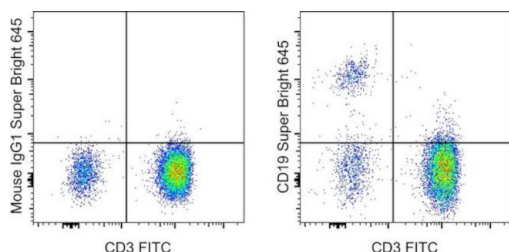
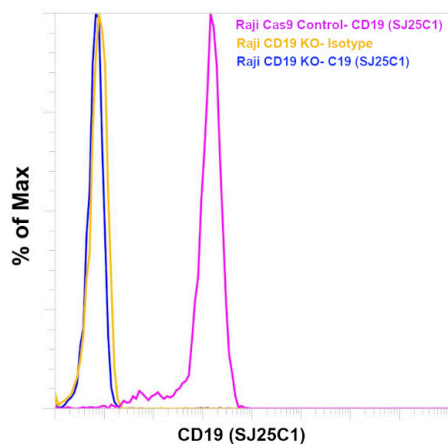
Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

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

## Product Images For CD19 Monoclonal Antibody (SJ25C1), Super Bright™ 645, eBioscience™

### CD19 Antibody (64-0198-42)

Antibody clone (SJ25C1) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in CD19 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using CD19 antibody (SJ25C1). Yellow histogram represents staining with the isotype control. {KO}



### CD19 Antibody (64-0198-42) in Flow

Normal human peripheral blood cells cells were stained with CD3 Monoclonal Antibody, FITC (Product # 11-0038-80) and Mouse IgG1 kappa Isotype Control, Super Bright 645 (Product # 64-4714-82) (left) or CD19 Monoclonal Antibody, Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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

## 7 References

### Immunohistochemistry (1)

Nature communications

#### Innate-like self-reactive B cells infiltrate human renal allografts during transplant rejection.

"Published figure using CD19 monoclonal antibody (Product # 64-0198-42) in Immunohistochemistry"

Authors: Asano Y, Daccache J, Jain D, Ko K, Kinloch A, Veselits M, Wolfgeher D, Chang A, Josephson M, Cunningham P, Tambur A, Khan AA, Pillai S, Chong AS, Clark MR

Year  
2021

### Flow Cytometry (6)

Biomolecules

#### Tyrosine Kinase Inhibitors Target B Lymphocytes.

"Published figure using CD19 monoclonal antibody (Product # 64-0198-42) in Flow Cytometry"

Authors: Upfold NLE, Petakh P, Kamyshnyi A, Oksenysh V

Year  
2023

Indian journal of pharmacology

#### Evaluation of peripheral lymphocyte subsets in acne vulgaris patients before and after systemic isotretinoin treatment.

"Published figure using CD19 monoclonal antibody (Product # 64-0198-42) in Flow Cytometry"

Authors: Gunaydin SD, Tezcan I

Year  
2022

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

### More applications with references on thermofisher.com

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