

# CD3e Monoclonal Antibody (145-2C11), Super Bright™ 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	145-2C11
Conjugate	Super Bright™ 780
Form	Liquid
Concentration	0.2 mg/mL
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_2784894

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	4 Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	1.0 µg/Test	33 Publications
ELISA (ELISA)	-	1 Publication

## Product Specific Information

**Description:** The 145-2C11 monoclonal antibody reacts with mouse CD3e, a 20 kDa subunit of the TCR complex. Along with the other CD3 subunits, gamma and delta, the epsilon chain is required for proper assembly, trafficking and surface expression of the TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells. Binding of 145-2C11 to TCR initiates the intracellular biochemical pathway resulting in cellular activation, proliferation, and apoptosis depending on specific conditions utilized. 145-2C11 is commonly used as a phenotypic marker for mouse T cells.

**Applications Reported:** This 145-2C11 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 145-2C11 antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 1.0 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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.

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).

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.

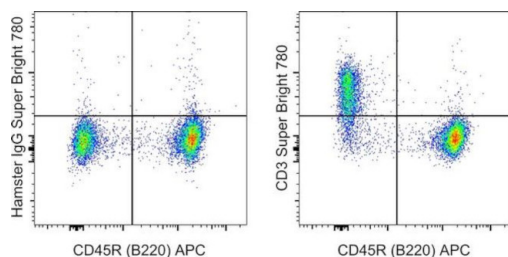
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100  $\mu$ L of cell sample + 100  $\mu$ 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: 780 nm; Laser: Violet Laser

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

## Product Images For CD3e Monoclonal Antibody (145-2C11), Super Bright™ 780, eBioscience™



### CD3e Antibody (78-0031-82) in Flow

C57BL/6 mouse splenocytes were stained with CD45R (B220) Monoclonal Antibody, APC (Product # 17-0452-82) and 1.0  $\mu$ g of Armenian Hamster IgG Isotype Control, Super Bright 780 (Product # 78-4888-82) (left) or 1.0  $\mu$ g of CD3 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

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

## Western Blot (1)

Journal of the American Heart Association

### **K<sub>Ca</sub>3.1 Channels Promote Cardiac Fibrosis Through Mediating Inflammation and Differentiation of Monocytes Into Myofibroblasts in Angiotensin II -Treated Rats.**

"Published figure using CD3e monoclonal antibody (Product # 78-0031-82) in Western Blot"

Authors: She G, Ren YJ, Wang Y, Hou MC, Wang HF, Gou W, Lai BC, Lei T, Du XJ, Deng XL

Year  
2019

## Immunohistochemistry (4)

Proceedings of the National Academy of Sciences of the United States of America

### **Lymph node formation and B cell homeostasis require IKK- in distinct endothelial cell-derived compartments.**

"Published figure using CD3e monoclonal antibody (Product # 78-0031-82) in Immunohistochemistry"

Authors: McCorkell KA, Jayachandran N, Cully MD, Freund-Brown J, Weinkopf T, Monslow J, Hu Y, Puré E, Freedman BD, Alvarez JI, Cancro MP, May MJ

Year  
2021

Frontiers in immunology

### **Optimization of Organotypic Cultures of Mouse Spleen for Staining and Functional Assays.**

"Published figure using CD3e monoclonal antibody (Product # 78-0031-82) in Immunocytochemistry"

Authors: Finetti F, Capitani N, Manganaro N, Tatangelo V, Libonati F, Panattoni G, Calaresu I, Ballerini L, Baldari CT, Patrussi L

Year  
2021

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

## Immunocytochemistry (1)

Frontiers in immunology

### **Optimization of Organotypic Cultures of Mouse Spleen for Staining and Functional Assays.**

"Published figure using CD3e monoclonal antibody (Product # 78-0031-82) in Immunocytochemistry"

Authors: Finetti F, Capitani N, Manganaro N, Tatangelo V, Libonati F, Panattoni G, Calaresu I, Ballerini L, Baldari CT, Patrussi L

Year  
2021

## More applications with references on thermofisher.com

**Flow (33)**   **ELISA (1)**

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