

# CD45 Monoclonal Antibody (30-F11), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	30-F11
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
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_2662420

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	16 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	3 Publications
Immunocytochemistry (ICC/IF)	-	5 Publications
Flow Cytometry (Flow)	0.5 µg/test	121 Publications

## Product Specific Information

**Description:** The 30-F11 monoclonal antibody reacts with all isoforms of mouse CD45, also known as Leukocyte Common Antigen (LCA). CD45 is expressed by all hematopoietic cells excluding mature erythrocytes and platelets. The cytoplasmic portion of CD45 has tyrosine phosphatase enzymatic activity and plays an important role in activation of lymphocytes.

**Applications Reported:** This 30-F11 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 30-F11 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 0.5 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 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.

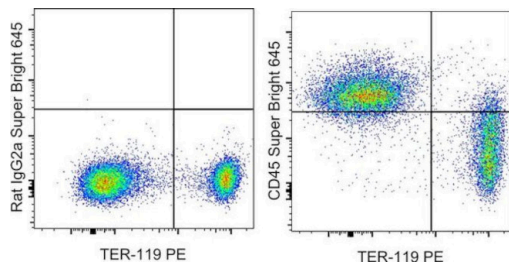
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (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 CD45 Monoclonal Antibody (30-F11), Super Bright™ 645, eBioscience™



### CD45 Antibody (64-0451-82) in Flow

Staining of C57Bl/6 bone marrow cells with Anti-Mouse TER-119 PE (Product # 12-5921-82) and 0.25  $\mu$ g of Rat IgG2a K Isotype Control Super Bright 645 (Product # 64-4321-82) (left) or 0.25  $\mu$ g of Anti-Mouse CD45 Super Bright 645. Total viable cells were used for analysis.

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

## Immunohistochemistry (16)

Cancer research communications

### Toll-like Receptor Signaling-deficient Cells Enhance Antitumor Activity of Cell-based Immunotherapy by Increasing Tumor Homing.

"Published figure using CD45 monoclonal antibody (Product # 64-0451-82) in Immunohistochemistry"

Authors: Morales-Molina A, Rodriguez-Milla M, Gambera S, Cejalvo T, de Andrés B, Gaspar ML, García-Castro J

Year  
2023

Cellular and molecular gastroenterology and hepatology

### A Point Mutation R122C in RUNX3 Promotes the Expansion of Isthmus Stem Cells and Inhibits Their Differentiation in the Stomach.

"Published figure using CD45 monoclonal antibody (Product # 64-0451-82) in Immunohistochemistry"

Authors: Douchi D, Yamamura A, Matsuo J, Lee JW, Nuttonmanit N, Melissa Lim YH, Suda K, Shimura M, Chen S, Pang S, Kohu K, Kaneko M, Kiyonari H, Kaneda A, Yoshida H, Taniuchi I, Osato M, Yang H, Unno M, Bok-Yan So J, Yeoh KG, Chuang LSH, Bae SC, Ito Y

Year  
2022

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## Immunohistochemistry (PFA fixed) (1)

Nature communications

### Genetic fate-mapping reveals surface accumulation but not deep organ invasion of pleural and peritoneal cavity macrophages following injury.

"Published figure using CD45 monoclonal antibody (Product # 64-0451-82) in Immunohistochemistry (PFA fixed)"

Authors: Jin H, Liu K, Tang J, Huang X, Wang H, Zhang Q, Zhu H, Li Y, Pu W, Zhao H, He L, Li Y, Zhang S, Zhang Z, Zhao Y, Qin Y, Pflanz S, Kasmi KEI, Zhang W, Liu Z, Ginhoux F, Ji Y, He B, Wang L, Zhou B

Year  
2021

## Immunohistochemistry (Frozen) (3)

Frontiers in molecular biosciences

### Transcriptional Network Analysis Reveals the Role of miR-223-5p During Diabetic Corneal Epithelial Regeneration.

"Published figure using CD45 monoclonal antibody (Product # 64-0451-82) in Immunocytochemistry"

Authors: Zhang Y, Dou S, Qi X, Zhang Z, Qiao Y, Wang Y, Xie J, Jiang H, Zhang B, Zhou Q, Wang Q, Xie L

Year  
2023

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

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ICC/IF (5)    Flow (121)

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