

# CD117 (c-Kit) Monoclonal Antibody (2B8), Super Bright 436, eBioscience™

| Product Details             |  |
|-----------------------------|--|
| Size                        | 100 µg   |
| Species                     | Mouse, Pig   |
| Published Species           | Artificial Control, Fish   |
| Expression System           | Rat / IgG2b, kappa   |
| Recommended Isotype Control | Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright 436, eBioscience™ |
| Class                       | Monoclonal   |
| Type                        | Antibody   |
| Clone                       | 2B8  |
| Conjugate                   | Super Bright 436   |
| 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_2637141   |

| Applications              | Tested Dilution | Publications    |
|---------------------------|-----------------|-----------------|
| Flow Cytometry (Flow)     | 0.06 µg/test    | 40 Publications |
| Immunocytochemistry (ICC) | -               | 1 Publication   |
| Immunofluorescence (IF)   | -               | 7 Publications  |

## Product Specific Information

Description: The 2B8 monoclonal antibody reacts with mouse CD117, also known as c-Kit receptor, Steel factor receptor, and stem cell factor receptor. A member of the tyrosine kinase receptor family, this 145-kDa molecule is expressed by a majority of hematopoietic progenitor cells characterized in the mouse bone marrow as a small subset of cells positive for Sca-1 and Thy1 (Thy1 low) and negative for lineage markers. The interaction of the mouse c-Kit receptor and steel factor promotes the proliferation and differentiation of hematopoietic progenitor cells. CD117 is also expressed by mast cells and plays a role in signaling and activation of these cells.

Applications Reported: This 2B8 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 2B8 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

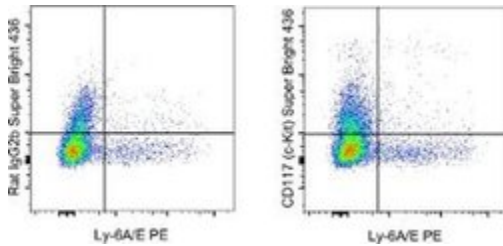
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

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

## Product Images For CD117 (c-Kit) Monoclonal Antibody (2B8), Super Bright 436, eBioscience™



### CD117 (c-Kit) Antibody (62-1171-82) in Flow

Staining of C57Bl/6 bone marrow cells with Anti-Mouse Ly-6A/E (Sca-1) PE (Product # 12-5981-82) and 0.03  $\mu\text{g}$  of Rat IgG2b K Isotype Control Super Bright 436 (Product # 62-4031-82) (left) or 0.03  $\mu\text{g}$  of Anti-Mouse CD117 (c-Kit) Super Bright 436 (right). Total viable cells were used for analysis.

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

## Flow Cytometry (40)

Frontiers in immunology

### Positive and Negative Regulatory Roles of C-Terminal Src Kinase (CSK) in FcRI-Mediated Mast Cell Activation, Independent of the Transmembrane Adaptor PAG/CSK-Binding Protein.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 62-1171-82) in Flow Cytometry"

Authors: Potuckova L, Draberova L, Halova I, Paulenda T, Draber P

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

Cell stem cell

### Remodeling of Bone Marrow Hematopoietic Stem Cell Niches Promotes Myeloid Cell Expansion during Premature or Physiological Aging.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 62-1171-82) in Flow Cytometry"

Authors: Ho YH, Del Toro R, Rivera-Torres J, Rak J, Korn C, García-García A, Macías D, González-Gómez C, Del Monte A, Wittner M, Waller AK, Foster HR, López-Otín C, Johnson RS, Nerlov C, Ghevaert C, Vainchenker W, Louache F, Andrés V, Méndez-Ferrer S

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

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

## Immunofluorescence (7)

Scientific reports

### Erythro-myeloid progenitors can differentiate from endothelial cells and modulate embryonic vascular remodeling.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 62-1171-82) in Immunofluorescence"

Authors: Kasaai B, Caolo V, Peacock HM, Lehoux S, Gomez-Perdiguero E, Lutun A, Jones EA

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

Nature communications

### Notch signal strength controls cell fate in the haemogenic endothelium.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 62-1171-82) in Immunofluorescence"

Authors: Gama-Norton L, Ferrando E, Ruiz-Herguido C, Liu Z, Liu Z, Guiu J, Islam AB, Lee SU, Yan M, Guidos CJ, López-Bigas N, Maeda T, Espinosa L, Kopan R, Bigas A

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2015

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

## More applications with references on thermofisher.com

## ICC (1)

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