

CD117 (c-Kit) Monoclonal Antibody (2B8), Super Bright™ 645, eBioscience™

| Product Details | |
|-----------------------------|---|
| Size | 100 µg |
| Species Reactivity | Mouse, Pig |
| Host/Isotype | Rat / IgG2b, kappa |
| Recommended Isotype Control | Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 645, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | 2B8 |
| 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_2662381 |

| Applications | Tested Dilution | Publications |
|------------------------------|-----------------|-----------------|
| Immunocytochemistry (ICC/IF) | - | 1 Publication |
| Flow Cytometry (Flow) | 0.5 µg/test | 19 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 may 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 10⁵ to 10⁸ 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.

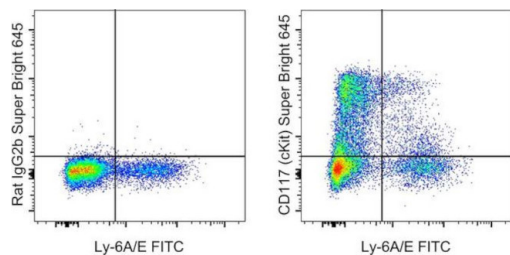
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ 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 CD117 (c-Kit) Monoclonal Antibody (2B8), Super Bright™ 645, eBioscience™



CD117 (c-Kit) Antibody (64-1171-82) in Flow

Staining of C57Bl/6 bone marrow cells with Anti-Mouse Ly-6A/E (Sca-1) FITC (Product # 11-5981-82) and 0.25 μ g of Rat IgG2b K Isotype Control Super Bright 645 (Product # 64-4031-82) (left) or 0.25 μ g of Anti-Mouse CD117 (c-Kit) Super Bright 645 (right). Total viable cells were used for analysis.

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Immunocytochemistry (1)

Stem cells (Dayton, Ohio)

Bone marrow-derived myeloid progenitors in the leptomeninges of adult mice.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 64-1171-82) in Immunocytochemistry"

Authors: Koeniger T, Bell L, Mifka A, Enders M, Hautmann V, Mekala SR, Kirchner P, Ekici AB, Schulz C, Wörsdörfer P, Menci S, Kleinschnitz C, Ergün S, Kuerten S

Year
2021

Flow Cytometry (19)

Frontiers in pain research (Lausanne, Switzerland)

mMCP7, a Mouse Ortholog of Tryptase, Mediates Pelvic Tactile Allodynia in a Model of Chronic Pelvic Pain.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 64-1171-82) in Flow Cytometry"

Authors: Pattabiraman G, Liu Z, Paul M, Schaeffer AJ, Thumbikat P

Year
2023

Scientific reports

Gastruloids as in vitro models of embryonic blood development with spatial and temporal resolution.

"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 64-1171-82) in Flow Cytometry"

Authors: Rossi G, Giger S, Hübscher T, Lutolf MP

Year
2022

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

More applications with references on thermofisher.com

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