

CD117 (c-Kit) Monoclonal Antibody (2B8), PE-Cyanine7, eBioscience™

Product Details	
Size	100 µg
Species	Mouse, Pig
Published Species	Artificial Control, Fish, Mouse
Expression System	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2B8
Conjugate	PE-Cyanine7
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469644

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	77 Publications
Immunofluorescence (IF)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

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 1 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.

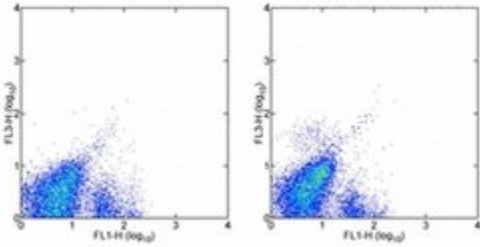
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

Product Images For CD117 (c-Kit) Monoclonal Antibody (2B8), PE-Cyanine7, eBioscience™



CD117 (c-Kit) Antibody (25-1171-82) in Flow

Staining of C57BL/6 bone marrow cells with Anti-Human/Mouse CD45R (B220) FITC (Product # 11-0452-82) and 0.5 μ g of Rat IgG2b K Isotype Control PE-Cyanine7 (Product # 25-4031-82) (left) or 0.5 μ g of Anti-Mouse CD117 (c-Kit) PE-Cyanine7 (right). Total viable cells were used for analysis.

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

79 References

Flow Cytometry (77)

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 # 25-1171-82) 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 # 25-1171-82) 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 (1)

Nature medicine

Chemotherapy-induced bone marrow nerve injury impairs hematopoietic regeneration.

"25-1171 was used in Flow cytometry/Cell sorting to demonstrate the potential benefit of adrenergic nerve protection for shielding hematopoietic niches from injury."

Authors: Lucas D, Scheiermann C, Chow A, Kunisaki Y, Bruns I, Barrick C, Tessarollo L, Frenette PS

Species
Mouse

Dilution
1:100

Year
2013

Miscellaneous PubMed (1)

Experimental hematology

Annexin-2 is a regulator of stromal cell-derived factor-1/CXCL12 function in the hematopoietic stem cell endosteal niche.

"25-1171 was used in Magnetic cell separation to investigate the role that annexin-2 plays in presenting stromal cell-derived factor-1 to hematopoietic stem cells."

Authors: Jung Y, Shiozawa Y, Wang J, Patel LR, Havens AM, Song J, Krebsbach PH, Roodman GD, Taichman RS

Species
Mouse

Dilution
Not Cited

Year
2011

More applications with references on thermofisher.com

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