

CD117 (c-Kit) Monoclonal Antibody (2B8), PerCP-eFluor 710, 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), PerCP-eFluor 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2B8
Conjugate	PerCP-eFluor™ 710
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_1834421

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	41 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 C57Bl/6 bone marrow cells. This can be used at less than or equal to 0.125 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.

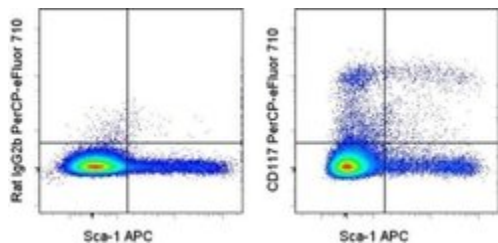
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

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 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

Product Images For CD117 (c-Kit) Monoclonal Antibody (2B8), PerCP-eFluor 710, eBioscience™



CD117 (c-Kit) Antibody (46-1171-82) in Flow

Staining of C57BL/6 bone marrow cells with Anti-Mouse Ly-6A/E (Sca-1) APC (Product # 17-5981-82) and 0.06 μ g of Rat IgG2b K Isotype Control PerCP-eFluor® 710 (Product # 46-4031-82) (left) or 0.06 μ g of Anti-Mouse CD117 (c-Kit) PerCP-eFluor® 710 (right). Lineage negative cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

41 References

Flow Cytometry (41)

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 # 46-1171-82) 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 # 46-1171-82) 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

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