

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

Product Details	
Size	100 µg
Species Reactivity	Mouse, Pig
Published Species	Fish, Mouse
Host/Isotype	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
Excitation/Emission Max	482/708 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
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	61 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 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.

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.

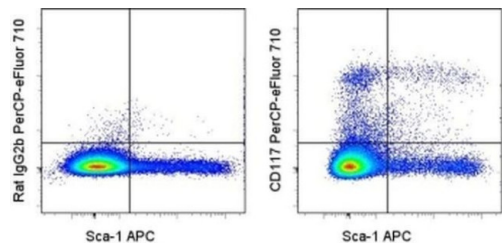
**Fixation:** Samples can be stored in IC Fixation Buffer (Product # 00-822-49) (100 µL of cell sample + 100 µL of IC Fixation

Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) 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 µm 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 µg of Rat IgG2b K Isotype Control PerCP-eFluor® 710 (Product # 46-4031-82) (left) or 0.06 µg of Anti-Mouse CD117 (c-Kit) PerCP-eFluor® 710 (right). Lineage negative cells in the lymphocyte gate were used for analysis.

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61 References

Flow Cytometry (61)

Frontiers in pain research (Lausanne, Switzerland)	Year 2023
<b>mMCP7, a Mouse Ortholog of Tryptase, Mediates Pelvic Tactile Allodynia in a Model of Chronic Pelvic Pain.</b>	
"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 46-1171-82) in Flow Cytometry"	
Authors: Pattabiraman G,Liu Z,Paul M,Schaeffer AJ,Thumbikat P	
Scientific reports	Year 2022
<b>Gastruloids as in vitro models of embryonic blood development with spatial and temporal resolution.</b>	
"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 46-1171-82) in Flow Cytometry"	
Authors: Rossi G,Giger S,Hübscher T,Lutolf MP	

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