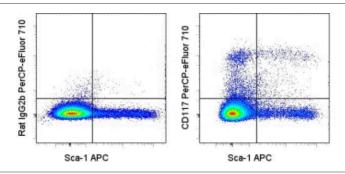


# Anti-Mouse CD117 (c-Kit) PerCP-eFluor® 710

Catalog Number: 46-1171

Also Known As:cKit, Steel Factor Receptor

RUO: For Research Use Only. Not for use in diagnostic procedures.



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

### **Product Information**

Contents: Anti-Mouse CD117 (c-Kit) PerCP-eFluor® 710

REF Catalog Number: 46-1171

Clone: 2B8

Concentration: 0.2 mg/mL Host/Isotype: Rat IgG2b, kappa **Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C. Do not freeze. Light

sensitive material.

LOT Batch Code: Refer to Vial ☐ Use By: Refer to Vial

Caution, contains Azide

#### 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<sup>lo</sup>) 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  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. 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 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL 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.

#### References

Ikuta K, Weissman IL. 1992. Evidence that hematopoietic stem cells express mouse c-kit but do not depend on steel factor for their generation. Proc Natl Acad Sci USA. 89(4): 1502-6.

## **Related Products**

12-5981 Anti-Mouse Ly-6A/E (Sca-1) PE (D7)

17-5981 Anti-Mouse Ly-6A/E (Sca-1) APC (D7)

46-4031 Rat IgG2b K Isotype Control PerCP-eFluor® 710

88-7772 Mouse Hematopoietic Lineage eFluor® 450 Cocktail (17A2, RA3-6B2, M1/70, TER-119, RB6-8C5)

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