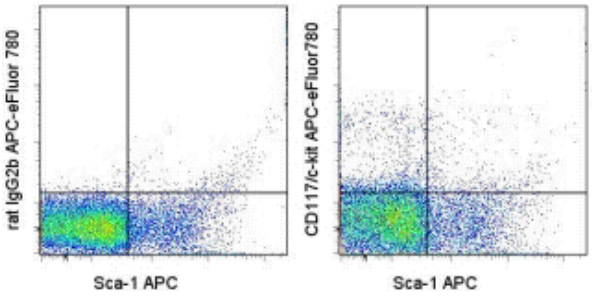
Anti-Mouse CD117 (c-Kit) APC-eFluor® 780

Catalog Number: 47-1171
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) PE (cat. 12-5981) and staining buffer (autofluorescence) (left) or 0.06 ug of Anti-Mouse CD117 (c-Kit) APC-eFluor® 780 (right). Cells in the Lineage(low) gate were used for analysis.

Product Information

Contents: Anti-Mouse CD117 (c-Kit) APC-eFluor® 780
REF **Catalog Number:** 47-1171
Clone: 2B8
Concentration: 0.2 mg/mL
Host/Isotype: Rat IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.
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^{lo}) 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 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

APC-eFluor® emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.

Light sensitivity: Tandem is sensitive 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 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)
47-4031 Rat IgG2b K Isotype Control APC-eFluor® 780

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