

ANTI-MOUSE CD117

**Allophycocyanin (APC)-Conjugated Monoclonal Antibody Against Mouse CD117 (c-Kit)
Clone 2B8**

Catalog # 10850

100 mg

PRODUCT DESCRIPTION:

CD117 is the receptor for stem cell factor (SCF), c-Kit. In adult mouse bone marrow (BM), CD117 is expressed on hematopoietic stem cells, pluripotent, myelomonocytic and erythroid progenitor cells and B and T lymphocyte precursors. CD117 is also expressed on tissue mast cells, and on subsets of dendritic cells. Anti-CD117 antibody clone 2B8 does not block the epitope that binds SCF. Anti-CD117-APC is recommended for detection of immature Lin⁻Kit⁺Sca1⁺ and Lin⁻Kit⁺Sca1⁻ BM subsets by three-colour flow cytometry in combination with FITC-labelled antibodies against lineage-specific antigens (CD3, cat no. 10700; CD11b, cat no. 10705,10706; Gr-1, cat no. 10717,10718; TER119, cat no. 10729) and PE-labelled anti-Sca1 (cat no. 10816).

Clone 2B8 was obtained by immunization of Wistar rats with mouse bone marrow mast cells and fusion of immunized rat spleen cells with mouse FOX-NY myeloma cells.¹

CLONE: 2B8

ISOTYPE: IgG2b, κ (rat)

It should be kept in mind that this product is a biological reagent, and as such cannot be completely characterized or quantified. Some variability is unavoidable.

FORMULATION:

100 µg in 0.5 mL (0.2 mg/mL) of an aqueous buffered solution containing 0.09% (w/v) sodium azide

STABILITY AND STORAGE:

Store at 4°C. Do not freeze. Product is stable for at least 6 months

Contents guaranteed sterile if seal is not tampered with.

DIRECTIONS FOR USE:

Flow cytometry:

Recommended amount per 1x10⁶ cells in a volume of 100 µL: ≤ 1 µg (5 µL)

**THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**

REFERENCES:

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2. Ikuta K, Weissman IL. Evidence that hematopoietic stem cells express mouse c-kit but do not depend on steel factor for their generation. *Proc Natl Acad Sci U S A.* 89:1502-1506, 1992.
3. Matsuzaki Y, Gytoku J, Ogawa M, Nishikawa S, Katsura Y, Gachelin G, Nakauchi H. Characterization of c-kit positive intrathymic stem cells that are restricted to lymphoid differentiation. *J Exp Med.* 178: 1283-1292, 1993.
4. Pulendran B, Lingappa J, Kennedy MK, Smith J, Teepe M, Rudensky A, Maliszewski CR, Maraskovsky E. Developmental pathways of dendritic cells in vivo: distinct function, phenotype, and localization of dendritic cell subsets in FLT3 ligand-treated mice. *J Immunol.* 159: 2222-2231, 1997.
5. Wognum AW, Eaves AC, Thomas TE. Identification and isolation of hematopoietic stem cells. *Arch Med Res.* 34: 461-475, 2003.