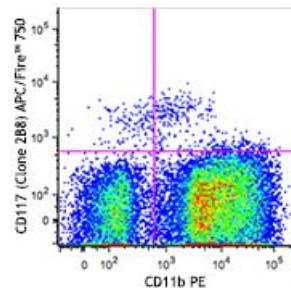


APC/Fire™ 750 anti-mouse CD117 (c-kit)

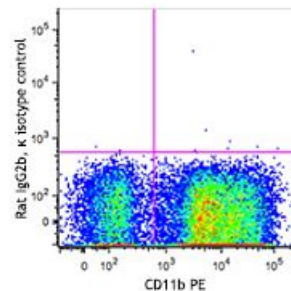
Catalog # / 1129190 / 100 µg
Size: 1129185 / 25 µg
Clone: 2B8
Isotype: Rat IgG2b, κ
Immunogen: Mouse bone marrow mast cells
Reactivity: Mouse
Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number: 750 under optimal conditions.
Concentration: 0.2 mg/ml



C57BL/6 mouse bone marrow cells were stained with CD11b PE and CD117 (clone 2B8) APC/Fire™ 750 (top) or rat IgG2b, κ APC/Fire™ 750 isotype control (bottom).

Applications:

Applications: Flow Cytometry
Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.



* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation¹ and immunohistochemistry of acetone fixed frozen sections². The 2B8 antibody does not block c-Kit activity.

Application References:

- Ikuta K, *et al.* 1992. *P. Natl. Acad. Sci. USA* 89:1502. (FC)
- Podd BS, *et al.* 2006. *J. Immunol.* 176:6532. [PubMed](#) (IHC)
- Bachelet I, *et al.* 2008. *J. Immunol.* 180:6064. [PubMed](#) (FC)
- Charles N, *et al.* 2010. *Nat. Med.* 16:701. [PubMed](#) (FC)

Description: CD117 is a 145 kD immunoglobulin superfamily member also known as c-Kit and stem cell factor receptor (SCFR). It is a transmembrane tyrosine-kinase receptor that binds the c-Kit ligand (also known as steel factor, stem cell factor, and mast cell growth factor). CD117 is expressed on hematopoietic stem cells (including multipotent hematopoietic stem cells, progenitors committed to myeloid and/or erythroid lineages, and T and B cell precursors), mast cells, and acute myeloid leukemia (AML) cells. CD117 interaction with its ligand is critical for the development of hematopoietic stem cells.

Antigen
References:

1. Barclay A, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Galli SJ, *et al.* 1994. *Adv. Immunol.* 55:1.
3. Ikuta K, *et al.* 1992. *Annu. Rev. Immunol.* 10:759.
4. Besmer P, *et al.* 1986. *Nature* 320:415.
5. Witte ON. 1990. *Cell* 63:5.