

Alexa Fluor® 488 anti-mouse CD117 (c-Kit)

Catalog # / Size: 1129080 / 100 µg
1129075 / 25 µg

Clone: 2B8

Isotype: Rat IgG2b, κ

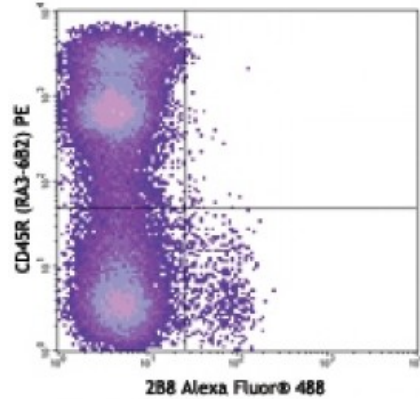
Immunogen: Mouse bone marrow mast cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse bone marrow cells stained with CD45R (RA3-6B2) PE and 2B8 Alexa Fluor® 488

Applications:

Applications: Immunofluorescence

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 microg per 10⁶ cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 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)
- Obata Y, *et al.* 2014. *Nat Commun.* 5:5715. [PubMed](#)

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:

- Barclay A, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
- Galli SJ, *et al.* 1994. *Adv. Immunol.* 55:1.
- Ikuta K, *et al.* 1992. *Annu. Rev. Immunol.* 10:759.
- Besmer P,