## **Product Data Sheet**

## Purified anti-mouse CD117 (c-Kit)

Catalog # / Size: 1129010 / 500 μg

1129005 / 50 μg

Clone: 2B8

**Isotype:** Rat IgG2b, κ

Immunogen: Mouse bone marrow mast cells

Reactivity: Mouse

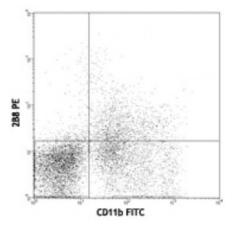
**Preparation:** The antibody was purified by affinity

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 bone marrow cells stained with 2B8 PE and CD11b FITC

## **Applications:**

**Applications:** Other

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  $\leq$ 0.06 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each

application.

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:

1. Ikuta K, et al. 1992. P. Natl. Acad. Sci. USA 89:1502. (FC)

2. Podd BS, et al. 2006. J. Immunol. 176:6532. PubMed (IHC)

3. Bachelet I, et al. 2008. J. Immunol. 180:6064. PubMed (FC)

4. 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 Sl, et al. 1994. Adv. Immunol. 55:1.

3. Ikuta K. et al. 1992. Annu. Rev. Immunol. 10:759.

4. Besmer P,