

## PE/Cy7 anti-mouse CD117 (c-kit)

**Catalog # / Size:** 135111 / 25 µg  
135112 / 100 µg

**Clone:** ACK2

**Isotype:** Rat IgG2b, κ

**Immunogen:** Murine IL-3 dependent mast cells

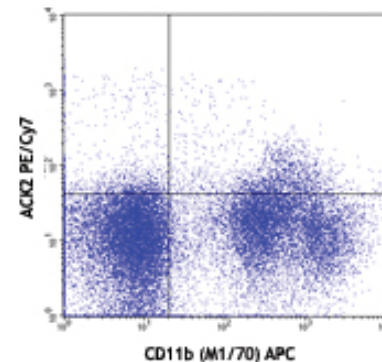
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

**Concentration:** 0.2 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Bone marrow cells from C57BL/6 mice stained with ACK2 PE/Cy7 and CD11b (M1/70) APC

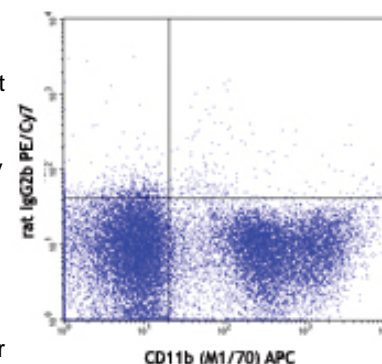
## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent 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.

**Application Notes:** ACK2 has been reported to block c-Kit function. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 135103). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 135114) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).

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Bone marrow cells from C57BL/6 mice stained with rat IgG2b PE/Cy7 isotype control and CD11b (M1/70) APC

**Application References:**

1. Yoshinaga K, *et al.* 1991. *Development* 113:689.
2. Broudy VC, *et al.* 1996. *Blood* 88:75.

**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. *et al.* 1990. *Cell* 63:5.

Related Products:	Product	Clone	Application
	PE/Cy7 Rat IgG2b, κ Isotype Ctrl	RTK4530	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	TruStain fcX™ (anti-mouse CD16/32)	93	FC



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