

Datasheet for ABIN135384

anti-KIT antibody**1** Image[Go to Product page](#)

Overview

Quantity:	0.5 mg
Target:	KIT
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This KIT antibody is un-conjugated
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Mouse IL-3-dependent bone marrow mast cells
Clone:	2B8
Isotype:	IgG2b
Specificity:	Mouse CD117, Mr 150 kDa
Characteristics:	Rat Anti-Mouse CD117-UNLB
Purification:	Purified

Target Details

Target:	KIT
Alternative Name:	CD117 (KIT Products)
Background:	The CD117/c-kit antigen is the cell-surface receptor for Stem Cell Factor (SCF). Together these

Target Details

molecules constitute a ligand/receptor pair which functions to maintain normal hematopoiesis in the adult. Signaling through SCF/c-kit has an important role in stimulating myeloid and erythroid production of primitive hematopoietic progenitor cells. A variety of cytokines act synergistically with SCF to stimulate proliferation and differentiation of bone marrow progenitor cells. For example, SCF plus IL-7 can stimulate the combined myeloid and B-cell differentiation of uncommitted hematopoietic progenitor cells.² SCF/c-kit also participates in erythropoiesis in both the bone marrow and spleen. Loss-of-function mutations for SCF/c-kit lead to a variety of pleiotropic developmental defects, while gain-of-function mutations can lead to constitutive activation of the kit receptor and links to cancer. Examples of the former are mast cell deficiency and severe macrocytic anemia, while the latter mutation has been identified in mastocytomas. Anti-CD117 mAbs have been used to block the function of the c-kit receptor in a variety of studies. These include the blockade of hematopoiesis and disruption of melanocyte development.

Pathways:

[RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Sensory Perception of Sound](#), [Stem Cell Maintenance](#), [Production of Molecular Mediator of Immune Response](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

Application Details

Application Notes:

- **Applications:** FC - Quality tested , IHC-FS - Reported in literature , ICC - Reported in literature , IP - Reported in literature
- **Working Dilutions:** Flow Cytometry FITC and PACBLU conjugates 1 g/10⁶ cells BIOT conjugate 0.3 g/10⁶ cells PE, APC, SPRD, CY5, APC/CY5.5, and APC/CY7 conjugates 0.2 g/10⁶ cells AF488 conjugate 0.1 g/10⁶ cells AF647 conjugate 0.05 g/10⁶ cells For flow cytometry, the suggested use of these reagents is in a final volume of 100 L

Comment:

Cell homing studies, Hematopoiesis and development studies

Sample Volume:

1 mL

Restrictions:

For Research Use only

Handling

Concentration:

0.5 mg/mL

Buffer:

0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No preservatives or amine-containing buffer salts added

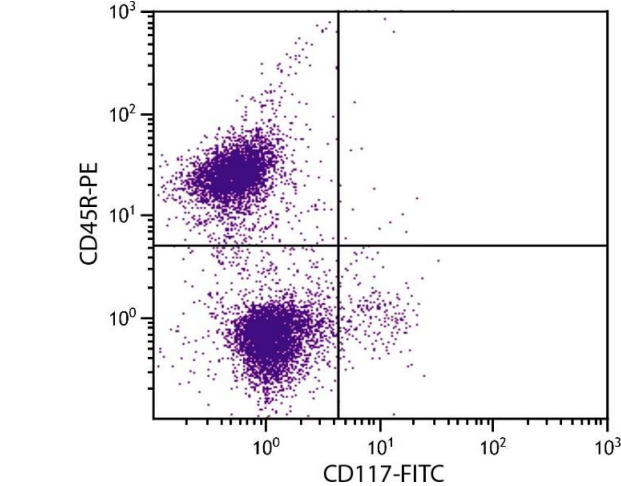
Preservative:

Without preservative

Handling

Handling Advice:	Each reagent is stable for the period shown on the bottle label if stored as directed.
Storage:	4 °C
Storage Comment:	Store at 2-8°C

Images



Flow Cytometry

Image 1. BALB/c mouse bone marrow cells were stained with Rat Anti-Mouse CD117-FITC.