

# Datasheet for ABIN1112041 anti-KIT antibody (PE)

## 1 Image



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#### Overview

Quantity:	100 tests
Target:	KIT
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KIT antibody is conjugated to PE
Application:	Flow Cytometry (FACS), Immunofluorescence (IF)

#### **Product Details**

Immunogen:	MOLM-1 megakaryocytic cells
Clone:	104D2
Isotype:	lgG1
Characteristics:	Monoclonal Mouse Anti-Human CD117 PE for identification of lymphoid progenitor.

### **Target Details**

Target:	KIT
Alternative Name:	CD117 (KIT Products)
Background:	Although CD117 is primarily a marker for non-lymphoid progenitor, it has been reported to be
	detected on early lymphoid progenitor. CD117 expression has been found on a small subset of
	resting NK cells (CD56 bright), and about 30% of immature CD3-/CD4-/CD8- thymocytes.
	CD117 is also expressed on mast cells and detected on non-hematopoietic cells such as

#### Target Details

reproductive system, melanocytes and embryonic brain. The CD117 antigen, also known as Stem Cell Factor Receptor (SCFR), mast-cell-Kit, and steel factor receptor, is a 145 kDa transmembrane glycoprotein encoded by the c-kit proto-oncogen. The CD117 molecule belongs to the class III Receptor Tyrosine Kinase (RTK) family. Within the haematopoeitic compartment, the CD117 molecule is expressed on approximately 50 % of CD34+ progenitors engaged in erythrocytic, myelo-monocytic and megakaryocytic differentiation.

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:** 

It is recommended for use in flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 20  $\mu$ l/10^6 cells.

Comment:

R-Phycoerythrin. Abs/Em. Max.: 565/575 nm. Anti-CD117 clone 104D2 was included in the 6th International Workshop on Human Leucocyte Differentiation Antigens (Code C-30).

Sample Collection:

1. Transfer 100  $\mu$ I of sample to a 12 x 75 mm polystyrene test tube (10^6 cells). 2. Add 20  $\mu$ I of CD117 PE and mix gently with a vortex mixer. The 20  $\mu$ I is a guideline only, the volume should be determined by the individual laboratory. 3. optimal The recommended negative control is a non-reactive PE-conjugated antibody of the same isotype. 4. Incubate in the dark at room temperature at 4°C for 30 minutes or at room temperature (20-25 °C) for 15 minutes. 5. Add 1,5 ml of Lysing Solution to each sample and mix gently with a vortex mixer. Incubate for 10 minutes at room temperature in the dark. 6. Centrifuge at 1000 x g for 5 minutes. Gently aspirate the supernatant and discard it leaving approximately 50  $\mu$ I of fluid. 7. Add 2 ml 0.01 mol/I PBS (It betters that it containing 2% bovine serum albumin) and resuspend the cells by using a vortex mixer. 8. Centrifuge at 1000 x g for 5 minutes. Gently aspirate the supernatant and discard it leaving approximately 50  $\mu$ I of fluid. 9. Resuspend pellet in an appropriate fluid for flow cytometry, e.g. 0.3 ml PBS. The PBS should contain 1% paraformaldehyde (fixative) if samples are not analysed the same day. 10. Analyse on a flow cytometer or store at 2-8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.

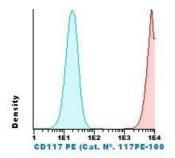
Restrictions:

For Research Use only

#### Handling

Format:	Liquid
Buffer:	The conjugate is provided in liquid form in buffer containing Antibody Stabilizer solution PBS 20 mM and 0,09% Sodium azide, pH 7.2.
Preservative:	Sodium azide
Precaution of Use:	1. The device is not intended for clinical use including diagnosis, prognosis, and monitoring of a disease state, and it must not be used in conjunction with patient records or treatment. 2. This product contains Sodium azide (NaN3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, Sodium azide may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing. 3. As with any product derived from biological sources, proper handling procedures should be used.
Storage:	4 °C

#### Images



Fluorescence profiles of MOE-7 cells unstained (blue histogram) or stained with CD117 PE (red histogram).

Cells were analyzed on a FACSCalibur (Becton Dickinson, San Jose, CA) flow cytometer, using Cell Quest acquisition software and INFINICYT, analysis software.

#### Image 1.