

Datasheet for ABIN1112040 **anti-KIT antibody (APC)**

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1 Image

Overview

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

Product Details

Immunogen:	MOLM-1 megakaryocytic cells
Clone:	104D2
Isotype:	IgG1
Characteristics:	Monoclonal Mouse Anti-Human CD117 APC 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 haematopoietic 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 µl/10⁶ cells.

Comment:

Allophycocyanin (APC), Abs/Em: 651/662 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 µl of sample to a 12 x 75 mm polystyrene test tube (10⁶ cells). 2. Add 20 µl of CD117 APC and mix gently with a vortex mixer. The 20 µl is a guideline only, the volume should be determined by the individual laboratory. 3. optimal The recommended negative control is a non-reactive APC-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 µl of fluid. 7. Add 2 ml 0.01 mol/l 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 µl 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

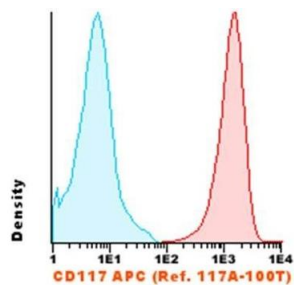


Image 1.

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

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