

Datasheet for ABIN638436  
**anti-KIT antibody (FITC)**



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## Overview

Quantity:	100 tests
Target:	KIT
Reactivity:	Human, Cow, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KIT antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

## Product Details

Immunogen:	MOLM-1 megakaryocytic cells
Clone:	104D2
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 104D2 detects extracellular part of CD117 / c-Kit protooncogen.
Cross-Reactivity (Details):	Human, Non-Human Primates, Bovine
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

## Target Details

Target:	KIT
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## Target Details

Alternative Name:	CD117 ( <a href="#">KIT Products</a> )
Background:	KIT proto-oncogene, receptor tyrosine kinase,CD117 / c-Kit (stem cell factor receptor) is a 145 kDa receptor tyrosine kinase that regulates cell proliferation, adhesion, chemotaxis, apoptosis and other cell processes. Mutations of CD117 / c-Kit can lead to growth and progression of tumours. After binding of its ligand, SCF (stem cell factor), CD117 / c-Kit is autophosphorylated on its intracellular domains and activated. CD117 is expressed on pluripotent hematopoietic progenitor cells, mast cells and various cancer cells, e.g. acute myeloid leukemia cells.,c-Kit, PBT, SCFR
Gene ID:	3815
UniProt:	<a href="#">P10721</a>
Pathways:	<a href="#">RTK Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Sensory Perception of Sound</a> , <a href="#">Stem Cell Maintenance</a> , <a href="#">Production of Molecular Mediator of Immune Response</a> , <a href="#">Regulation of long-term Neuronal Synaptic Plasticity</a>

## Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µL reagent / 100 µL of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

## Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	<b>Do not freeze.</b> Avoid prolonged exposure to light.

## Handling

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Storage: 4 °C

Storage Comment: Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

## Publications

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Product cited in: Stevenson, McGlynn, Hodge, McLinden, George, Davies, Shiels: "Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations." in: **Stem cells and development**, Vol. 18, Issue 10, pp. 1389-98, (2009) ([PubMed](#)).

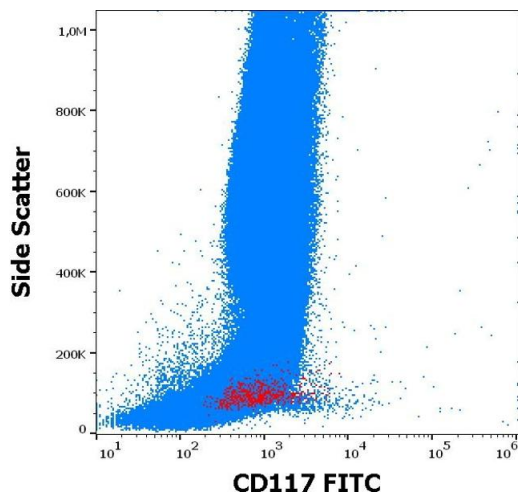
Nagano, Yamashita, Hamada, Ohneda, Kimura, Nakagawa, Shibuya, Yoshikawa, Ohneda: "Identification of functional endothelial progenitor cells suitable for the treatment of ischemic tissue using human umbilical cord blood." in: **Blood**, Vol. 110, Issue 1, pp. 151-60, (2007) ([PubMed](#)).

Wihlidal, Varga, Pfeilstöcker, Karlic: "Expression and functional significance of osteocalcin splicing in disease progression of hematological malignancies." in: **Leukemia research**, Vol. 30, Issue 10, pp. 1241-8, (2006) ([PubMed](#)).

Blair, Sutherland: "Primitive acute myeloid leukemia cells with long-term proliferative ability in vitro and in vivo lack surface expression of c-kit (CD117)." in: **Experimental hematology**, Vol. 28, Issue 6, pp. 660-71, (2000) ([PubMed](#)).

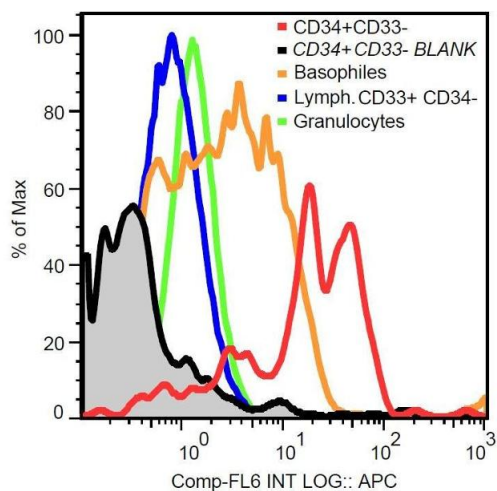
Yoshino, Ami, Terao, Tashiro, Honda: "Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies." in: **Experimental animals / Japanese Association for Laboratory Animal Science**, Vol. 49, Issue 2, pp. 97-110, (2000) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



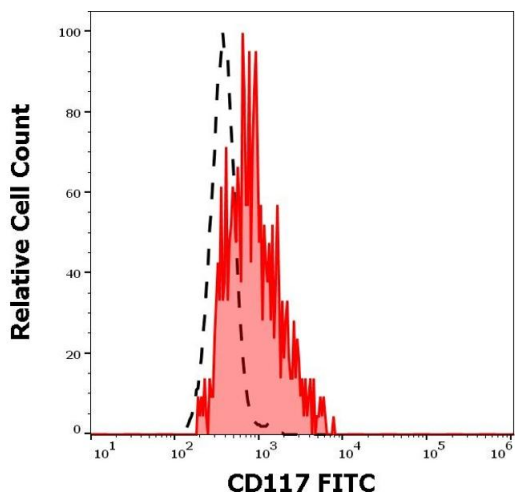
Flow Cytometry

**Image 1.** Flow cytometry surface staining pattern of human peripheral whole blood showing CD34 positive stem cells (red) stained using anti-human CD117 (104D2) FITC antibody (20  $\mu$ L reagent / 100  $\mu$ L of peripheral whole blood).



Flow Cytometry

**Image 2.** Surface staining of human peripheral blood cells with anti-CD117 (104D2) purified.



Flow Cytometry

**Image 3.** Separation of human stem cells (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD117 (104D2) FITC antibody (20  $\mu$ L reagent / 100  $\mu$ L of peripheral whole blood).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN638436.