

## Monoclonal Antibody to CD117 / c-kit - PE

<b>Alternate names:</b>	KIT, Mast/stem cell growth factor receptor, Proto-Oncogene Tyrosine-Protein Kinase, SCFR
<b>Catalog No.:</b>	SM1720RT
<b>Quantity:</b>	25 Tests
<b>Background:</b>	c-kit, also known as stem cell factor receptor, steel factor receptor or CD117 is classified as a type III receptor tyrosine kinase (RTK) belonging to the platelet-derived growth factor receptor subfamily. Binding of stem cell factor (SCF), known as c-kit ligand to c-kit initiate autophosphorylation of the receptor, subsequently leading to promotes a signal transduction cascade through Ras-Raf-MAP kinase cascade, phosphatidylinositol-3-kinase, src family kinases, and STATs. The role of c-kit includes maturation of hematopoietic and primordial germ cells precursors and melanocytes during embryonic development. In acute myeloid leukemia (AML), c-kit has been proposed to play a functional role, and becomes target molecule for drug development.
<b>Uniprot ID:</b>	<a href="#">P10721</a>
<b>NCBI:</b>	<a href="#">NP_000213.1</a>
<b>GeneID:</b>	<a href="#">3815</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	104D2
<b>Immunogen:</b>	MOLM-1 Megakaryocyte cell line.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.09% Sodium Azide <b>Stabilizers:</b> 0.2% BSA <b>Label:</b> PE – R. Phycoerythrin (RPE)
<b>Applications:</b>	<b>Flow Cytometry:</b> Use 20 µl of <i>Neat</i> antibody to label 10 <sup>6</sup> cells in 100 µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognises the CD117 cell surface antigen. Functionally CD117 is a receptor for stem cell factor, and has receptor tyrosine kinase activity. <b>Species:</b> Human, Cynomolgus Monkey and Bovine. Other species not tested.
<b>Storage:</b>	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light. Shelf life: one year from despatch.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

- General References:**
1. Broudy, V.C. et al. (1998) Analysis of c-kit receptor dimerization by fluorescence resonance energy transfer. *Blood* 91: 898-906.
  2. Yoshino, N. et al. (2000) 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. *Exp. Anim.* 49: 97-110.
  3. Jayapal, M. et al. (2006) Genome-wide gene expression profiling of human mast cells stimulated by IgE or FcepsilonRI-aggregation reveals a complex network of genes involved in inflammatory responses. *BMC Genomics.* 7: 210-26.
  4. Randall, V.A. et al. (2008) Stem cell factor/c-Kit signalling in normal and androgenetic alopecia hair follicles. *J Endocrinol.* 197: 11-23.

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