



PB-586-T025

## Monoclonal Antibody to CD117 Pacific Blue™ conjugated (25 tests)

<b>Clone:</b>	104D2
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The mouse monoclonal antibody 104D2 detects extracellular part of CD117 / c-Kit protooncogen. HLDA VI; WS Code C-30
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	MOLM-1 megakaryocytic cells
<b>Species Reactivity:</b>	Human, Non-Human Primates, Bovine
<b>Preparation:</b>	The purified antibody is conjugated with Pacific Blue™ under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Rappold I, Ziegler BL, Köhler I, Marchetto S, Rosnet O, Birnbaum D, Simmons PJ, Zannettino AC, Hill B, Neu S, Knapp W, Alitalo R, Alitalo K, Ullrich A, Kanz L, Bühring HJ: Functional and phenotypic characterization of cord blood and bone marrow subsets expressing FLT3 (CD135) receptor tyrosine kinase. *Blood*. 1997 Jul 1;90(1):111-25.
- \*Broudy VC, Lin NL, Bühring HJ, Komatsu N, Kavanagh TJ: Analysis of c-kit receptor dimerization by fluorescence resonance energy transfer. *Blood*. 1998 Feb 1;91(3):898-906.
- \*Broudy VC, Lin NL, Liles WC, Corey SJ, O'Laughlin B, Mou S, Linnekin D: Signaling via Src family kinases is required for normal internalization of the receptor c-Kit. *Blood*. 1999 Sep 15;94(6):1979-86.
- \*Yoshino N, Ami Y, Terao K, Tashiro F, Honda M: 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*. 2000 Apr;49(2):97-110.
- \*Blair A, Sutherland HJ: Primitive acute myeloid leukemia cells with long-term proliferative ability in vitro and in vivo lack surface expression of c-kit (CD117). *Exp Hematol*. 2000 Jun;28(6):660-71.
- \*Wihlidal P, Varga F, Pfeilstöcker M, Karlic H: Expression and functional significance of osteocalcin splicing in disease progression of hematological malignancies. *Leuk Res*. 2006 Oct;30(10):1241-8.
- \*Nagano M, Yamashita T, Hamada H, Ohneda K, Kimura K, Nakagawa T, Shibuya M, Yoshikawa H, Ohneda O: Identification of functional endothelial progenitor cells suitable for the treatment of ischemic tissue using human umbilical cord blood. *Blood*. 2007 Jul 1;110(1):151-60.
- \*Stevenson KS, Mc Glynn L, Hodge M, Mc Linden H, George WD, Davies RW, Shiels PG: Isolation, Characterisation and Differentiation of Thy1.1 sorted Pancreatic Adult Progenitor Cell Populations. *Stem Cells Dev*. 2009 Mar 27.
- \*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- \*And other.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at [www.exbio.cz](http://www.exbio.cz).

This product is provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Exbio Praha, a.s., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity), including use in flow cytometry that does not utilize a bead based array, but excluding use in combination with microarrays or High Content Screening. The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

**For laboratory research only, not for drug, diagnostic or other use.**

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic  
Tel: +420 261 090 666 | Fax: +420 261 090 660 | [orders@exbio.cz](mailto:orders@exbio.cz) | [www.exbio.cz](http://www.exbio.cz)