



T4-586-T100

Monoclonal Antibody to CD117 APC-Cy™7 conjugated (100 tests)

Clone:	104D2
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody 104D2 detects extracellular part of CD117 / c-Kit protooncogen. HLDA VI; WS Code C-30
Regulatory Status:	RUO
Immunogen:	MOLM-1 megakaryocytic cells
Species Reactivity:	Human, Non-Human Primates, Bovine
Preparation:	The purified antibody is conjugated with tandem dye APC-Cy™7 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	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.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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.

Cy™ and CyDye™ are registered trademarks of GE Healthcare.

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 | www.exbio.cz