

**Analyte Specific Reagent.**

Analytical and performance characteristics are not established.

**SPECIFICITY**

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 (1).

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<sup>+</sup> progenitors engaged in erythrocytic (2), myelomonocytic and megakaryocytic differentiation (2, 3).

Although CD117 is primarily a marker for non-lymphoid progenitor, it has been reported to be detected on early lymphoid progenitor (3).

CD117 expression has been found on a small subset of resting NK cells (CD56<sup>bright</sup>), and about 30% of immature CD3<sup>-</sup> CD4<sup>-</sup> CD8<sup>-</sup> thymocytes (2). CD117 is also expressed on mast cells (2, 3) and detected on non-hematopoietic cells such as reproductive system, melanocytes and embryonic brain (2).

MAb 104D2D1 was assigned to CD117 during the 6<sup>th</sup> HLDA Workshop on Human Leucocyte Differentiation Antigens held in Kobe, Japan, in 1996 (WS Code: C-30. Section C) (2).

**REAGENT**

IOTest CD117-PE Conjugated Antibody

PN IM2732U – 2 mL Liquid – 20 µL / test\*.

<b>Clone</b>	104D2D1
<b>Isotype</b>	IgG1, mouse
<b>Immunogen</b>	Moln-1 Cell Line
<b>Hybridoma</b>	SP2/O x Balb/c
<b>Source</b>	Ascites fluid
<b>Purification</b>	Ion exchange or affinity chromatography
<b>Conjugation</b>	PE (Phycoerythrin) is conjugated at 0.5 – 1.5 moles of PE per mole of Ig.
PE (Orange)	Excites at 486 – 580 nm Emits at 568 – 590 nm

**Buffer** 2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide.

**STATEMENT OF WARNINGS**

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
2. All specimens and samples must be considered as potentially infectious and must be handled with care (in particular: the wearing of protective gloves, gowns and goggles).
3. Do not expose reagents to strong light during storage or incubation.
4. Avoid microbial contamination of reagents or incorrect results might occur.
5. Avoid contact of samples with skin mucosa and eyes. Never pipet by mouth
6. Do not use reagent beyond the expiration date on the vial label.
7. Let it come to room temperature (18 – 25°C) before use.
8. Use general good laboratory practices when handling this reagent.

**STORAGE CONDITIONS AND STABILITY**

This reagent is stable up to the expiration date when stored at 2 – 8°C. Do not freeze. Minimize exposure to light.

**EVIDENCE OF DETERIORATION**

Any change in the physical appearance of this PE-labeled reagent (clear, colorless to pink liquid) or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used.

**REAGENT PREPARATION**

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

**SELECTED RESEARCH REFERENCES**

1. Kikutani, H., Kishimoto, T., "The cytokine receptors: Section report", 1995, Leucocyte Typing V, White Cell Differentiation Antigens. Schlossman, S.F., et al., Eds., Oxford University Press, 1855-1864.
2. Ashman, L.K., Cambareri, A.C., Nguyen, L., Bühring, H-J., "CD117 Workshop panel report", 1997, Leucocyte Typing VI, White Cell Differentiation Antigens. Kishimoto, T., et al, Eds., Garland Publishing, Inc., 816-818.
3. Uoshima, N., Ozawa, M., Kimura, S., Tanaka, K., Wada, K., Kobayashi, Y., Kondo, M., "Changes in c-Kit expression and effects of SCF during differentiation of human erythroid progenitor cells", 1995, Br. J. Haematol., 91, 30-36.

**PRODUCT AVAILABILITY**

IOTest CD117-PE Conjugated Antibody  
PN IM2732U – 2 mL Liquid – 20 µL / test\*.

For additional information in the USA, call 800-526-7694.

Outside the USA, contact your local Beckman Coulter representative.  
www.beckmancoulter.com

**TRADEMARKS**

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(\*): 20 µL is the quantity of product sufficient to stain 5 x 10<sup>5</sup> cells in a standard immunofluorescence assay

