

# Anti-Human CD117 (104D2)



PE	I17PE-100T	100 test
APC	I17A-100T	100 test
PerCP-Cyanine5.5	I17PPC5.5-100T	100 test
PE-Cyanine7	I17PC7-100T	100 test



## 1. PRODUCT DESCRIPTION

- **Clone:** 104D2;
- **Isotype:** IgG1;
- **Tested application:** flow cytometry;
- **Immunogen:** The anti-CD117 monoclonal antibody derives from MOLM-1 megakaryocytic cell line;
- **Species reactivity:** Human, Cross-Reactivity: Cynomolgus, Cattle (Bovine, Cow);
- **Storage instruction:** store in the dark at 2-8 °C;
- **Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);
- **Recommended usage:** Immunostep's CD117, clone 104D2, is a monoclonal antibody intended for the identification and enumeration of lymphoid progenitor using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells;
- **Presentation:** liquid;
- **Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
- **Purification:** Affinity chromatography;
- **Other names:** Stem cell factor receptor, c-kit, mast cell growth factor receptor, steel factor receptor;
- **Gene ID:** 3815;
- **Molecular weight:** 145 kDa.

## 2. ANTIGEN DETAILS

**Large description:** This antibody reacts with the CD117 antigen, which is expressed within the haematopoietic compartment on approximately 50 % of CD34+ progenitors engaged in erythrocytic, myelo-monocytic and megakaryocytic differentiation. The 104D2 monoclonal antibody reacts with human CD117, also known as c-Kit, Steel factor receptor and stem cell factor receptor. A member of the tyrosine kinase receptor family, this 145 kDa molecule is expressed by hematopoietic progenitor cell subsets and mast cells. The interaction of c-Kit and Steel factor promotes proliferation and differentiation of hematopoietic progenitor cells and mast cell differentiation.<sup>(1-5)</sup>

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

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Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

Please, refer to [www.immunostep.com](http://www.immunostep.com) technical support for more information.

## 5. REFERENCES

1. Gonzalez-de-Olano D, Matito A, Orfao A, Escribano L. Advances in the understanding and clinical management of mastocytosis and clonal mast cell activation syndromes. *F1000Res*;5:2666.
2. Columbo M, Horowitz EM, Botana LM, MacGlashan DW, Jr., Bochner BS, Gillis S, et al. The human recombinant c-kit receptor ligand, rhSCF, induces mediator release from human cutaneous mast cells and enhances IgE-dependent mediator release from both skin mast cells and peripheral blood basophils. *J Immunol*1992 Jul 15;149(2):599-608.
3. Ikuta K, Uchida N, Friedman J, Weissman IL. Lymphocyte development from stem cells. *Annu Rev Immunol*1992;10:759-83.
4. Werfel T, Zwirner J, Oppermann M, Sieber A, Begemann G, Drommer W, et al. CD88 antibodies specifically bind to C5aR on dermal CD117+ and CD14+ cells and react with a desmosomal antigen in human skin. *J Immunol*1996 Aug 15;157(4):1729-35.
5. Bravo P, Agustin BD, Bellas C, Gonzalez D, Camara C, Fuertes IF, et al. Expression of high amounts of the CD117 molecule in a case of B-cell non-Hodgkin's lymphoma carrying the t(14;18) translocation. *Am J Hematol*2000 Apr;63(4):226-9.

## 6. EXPLANATION OF SYMBOLS



Fluorochrome



Product reference



Content for <n> analysis



Regulatory Status



Research Use Only



Manufacturer

## 7. MANUFACTURED BY:

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