

Anti-Human CD117 (104D2)



REF



[A]



PE	I17PE-100T	100 test	20 µL/test	0,05 mg/ml
APC	I17A-100T	100 test	20 µL/test	0,05 mg/ml
PerCP-Cyanine5.5	I17PPC5.5-100T	100 test	5 µL/test	0,2 mg/ml
PE-Cyanine7	I17PC7-100T	100 test	5 µL/test	0,2 mg/ml

RUO

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 (NaN₃);
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 10⁶ 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.⁽¹⁻⁵⁾

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.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.

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 technical support for more information.

5. PROTOCOL

Direct Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 µl (10⁶ cells/test) of the sample to a 12 x 75 mm polystyrene test tube.
2. Add the suggested volume indicated on the antibody vial to the 12x75 mm cytometer tube.
3. Mix well and incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution).
5. Centrifuge tubes at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
6. Resuspend and wash with 3-5 mL of PBS at 540xg for 5 min.
7. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and acquire on the flow cytometer are recorded.
8. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.

6. 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, Fuentes 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.

7. EXPLANATION OF SYMBOLS



Form

REF

Catalog reference



Contains sufficient for > test



Quantity per test



Regulatory Status

RUO

Research Use Only

[A]

Concentration



Manufacturer

8. MANUFACTURED BY:



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