

Anti-Human CD7 (HIT7)



PE 7PE-100T 100 test 20 µL/test 2 ml



1. PRODUCT DESCRIPTION

Clone: HIT7;
Isotype: IgG1;
Tested application: flow cytometry;
Immunogen: The anti-CD7 monoclonal antibody derives from T cells;
Species reactivity: Human;
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 CD7, clone HIT7, is a monoclonal antibody intended for the identification and enumeration of human T cells 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: gp40, T-cell antigen CD7, GP40, T-cell leukemia antigen, T-cell surface antigen Leu-9, TP48;
Gene ID: 924;
Molecular weight: 40 kDa.

2. ANTIGEN DETAILS

Large description: The monoclonal antibody is directed against the CD7-antigen (3AI-antigen), which is expressed on human T lymphocytes. The monoclonal antibody reacts with the cells of the T lymphocyte lineage, with the cells of patients with a Lymphocytic Leukaemia of the T lymphocyte origin, and with the cells of patients with the Sezary Syndrome. Platelets and cells of the B lymphocyte myelocytic and monocytic lineage are found negative.^[1-6]

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.

■ Indirect 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 purified reagent according to manufacturer's recommendation and mix gently with a vortex mixer.
3. Incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. Add 2 mL 0.01 mol/L PBS (It betters that it containing 2% bovine serum albumin) and resuspend the cells by using a vortex mixer. Centrifuge at 540xg for 5 min in order to remove the McAb not bound to its antigen.
5. Add a secondary conjugated reagent with some fluorochrome and mix. Incubate at room temperature for 15 min in the dark. The absence of light is necessary as the fluorochrome is photoinstability.
6. 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). Centrifuge at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
7. Resuspend and a made a final wash with 3-5 mL of PBS at 540xg for 5 min.
8. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and acquire on the flow cytometer are recorded.
9. 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. Al Saati T, Alibaud L, Lamant L, Boyes J, March M, Delsol G. A new monoclonal anti-CD7 antibody reactive on paraffin sections. Appl Immunohistochem Mol Morphol 2001 Dec;9(4):289-96.
2. Knapp W. Leucocyte typing IV : white cell differentiation antigens. Oxford: Oxford University Press; 1989.
3. Link M, Warnke R, Finlay J, Amylon M, Miller R, Dille J, et al. A single monoclonal antibody identifies T-cell lineage of childhood lymphoid malignancies. Blood 1983 Oct;62(4):722-8.
4. Miwa H, Nakase K, Kita K. Biological characteristics of CD7(+) acute leukemia. Leuk Lymphoma 1996 Apr;21(3-4):239-44.
5. Sempowski GD, Lee DM, Kaufman RE, Haynes BF. Structure and function of the CD7 molecule. Crit Rev Immunol 1999;19(4):331-48.
6. Weiss LM, Crabtree GS, Rouse RV, Warnke RA. Morphologic and immunologic characterization of 50 peripheral T-cell lymphomas. Am J Pathol 1985 Feb;118(2):316-24.

7. EXPLANATION OF SYMBOLS



Form



Catalog reference



Contains sufficient for <n> test



Quantity per test



Regulatory Status



Research Use Only



Manufacturer

8. MANUFACTURED BY:

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