Anti-Human CD123 (6H6)

















PE 123PE2-100T APC 123A2-100T 100 test 20 µL/test 100 test 20 µL/test

st 2 mg/mlt st 2 mg/ml RUO

PRODUCT DESCRIPTION

Clone: 6H6;

Isotype: Mouse IgGI;

Tested application: flow cytometry;

Immunogen: Human IL-3Rα transfected COS 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 (NaN.);

Recommended usage: Immunostep's CD123, clone 6H6, is a monoclonal antibody intended for the identification and enumeration of dendritic cells using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using I test for IO⁶ cells:

Presentation: liquid;

Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;

Purification: Affinity chromatography:

Other names: IL3RA, IL3R, IL3RAY, IL3RX, IL3RY, hIL3Ra, IL3Ra;

Gene ID: 3563:

Molecular weight: 41 kDa.

2. ANTIGEN DETAILS

Large description: This antibody reacts with the CD123 antigen, the α chain of the IL-3 receptor. This 60-70 RDa transmembrane protein binds to IL-3 with low affinity by itself, and when associated with CD131 (common β chain) binds IL-3 with high affinity. CD123 is expressed by myeloid precursors, macrophages, dendritic cells, mast cells, basophils, and megakaryocytes. At the level of the hematopoietic system IL-3R alpha expression was described on bone marrow CD34+cells (including primitive multipotential and committed progenitors), granulocytes, monocytes/macrophages, megakaryocytes and B-lymphocytes. Although the IL-3R alpha is expressed on the large majority of progenitor cells, it does not seem to be expressed on the stem cell fraction. $^{(1)}$

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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5. PROTOCOL

Direct Immunofluorescence Cell Surface Staining Protocol

- 1. Transfer 100 ul (106 cells/test) of the sample to a 12 x 75 mm polystyrene
- Add the suggested volume indicated on the antibody vial to the 12x75 mm cytometer tube.
- 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.
- 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 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.
- After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and adquire 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 ul (106 cells/test) of the sample to a 12 x 75 mm polystyrene test tube
- 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.
- 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.
- 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 adquire 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

- Choi KD, Vodyanik M, Slukvin, II. Hematopoietic differentiation and production of mature myeloid cells from human pluripotent stem cells. Nat Protoc Mar;6(3):296-313.
- Mardiros A, Dos Santos C, McDonald T, Brown CE, Wang X, Budde LE, et al. T cells expressing CDI23-specific chimeric antigen receptors exhibit specific cytolytic effector functions and antitumor effects against human acute myeloid leukemia. Blood Oct 31:122(18):3138-48.
- van Dongen JJ, Lhermitte L, Bottcher S, Almeida J, van der Velden VH, Flores-Montero J, et al. EuroFlow antibody panels for standardized n-dimensional flow cytometric immunophenotyping of normal, reactive and malignant leukocytes. Leukemia Sep;26(9):1908-75.

EXPLANATION OF SYMBOLS

\ . }	Form
REF	Catalog reference
Σ	Contains sufficient for > test
\Diamond	Quantity per test
	Regulatory Status
RUO	Research Use Only
[A]	Concentration
•••	Manufacturer

8. MANUFACTURED BY:



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