Anti-Human CD10 (HI10a)

	REF	Σ		[A]	
APC	10A-100T	100 test	20 µL/test	2 mg/ml	RUO
APC-C750	10AC750-100T	100 test	5 µL/test	0,05 mg/ml	
PE/Cyanine7	10PC7-100T	100 test	5 µL/test	0,05 mg/ml	

1. PRODUCT DESCRIPTION

Clone: HI10a;
Isotype: IgG1;
Tested application: flow cytometry;
Immunogen: The anti-CD10 monoclonal antibody derives from leukemia cells;
Species reactivity: Human. Cross-Reactivity: Chimpanzee, Baboon, Cynomolgus, Rhesus, Capuchin Monkey;
Storage instruction: store in the dark at 2-8 °C;
Storage buffer: aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN_3);
Recommended usage: Immunostep's CD10, clone HI10a, is a monoclonal antibody intended for the identification and enumeration of human common acute lymphoblastic leukaemia antigen (CALLA) using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10^6 cells;
Presentation: liquid;
Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
Purification: Affinity chromatography;
Other names: Neutral endopeptidase, Common Acute Lymphocytic Leukemia Antigen (CALLA), Neprilysin, Atriopeptidase, Enkephalinase, Neutral endopeptidase 24.11, Skin fibroblast elastase;
Gene ID: 4311;
Molecular weight: 100 kDa.

2. ANTIGEN DETAILS

Large description: The monoclonal antibody is directed against the CD10- antigen (CALL-antigen), which is expressed on human lymphoblasts. The antibody reacts with early B lymphocytes (stem-cell, pre-B) and with the stem-cell of the lymphocyte lineage and immature thymocytes. Lymphoblasts of a patient with an Acute Lymphocytic Leukaemia of the c-ALL type were found to be positive. Normal B- and T lymphocytes, monocytes and platelets were found to be negative.[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 ul (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 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.
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.
   mx. 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

1. Castoldi G. Recent advances in the cytobiology of leukemias. Haematologica1997 Jan-Feb;82(1):1-3.
2. Delia D, Cattoretti G, Bonati A, Villa S, De Braud F, Buscaglia M. Detection of the common acute lymphoblastic leukaemia antigen (CALLA) on B cells from human fetal tissues. A multiple phenotypic characterization. Clin Exp Immunol1985 Feb;59(2):305-14.
3. Schlossman SF. Leucocyte typing V : white cell differentiation antigens : proceedings of the Fifth International Workshop and Conference : held in Boston, USA, 3-7 November, 1993. Oxford: Oxford University Press; 1995.
4. Tabernero MD, Bortoluci AM, Alaejos I, Lopez-Berges MC, Rasillo A, Garcia-Sanz R, et al. Adult precursor B-ALL with BCR/ABL gene rearrangements displays a unique immunophenotype based on the pattern of CD10, CD34, CD13 and CD38 expresssion. Leukemia2001 Mar;15(3):406-14.
5. Consolini R, Legitimo A, Rondelli R, et al. Clinical relevance of CD10 expression in childhood ALL. Haematologica. 1998;83:967-973.

7. EXPLANATION OF SYMBOLS

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

8. MANUFACTURED BY:

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