

For Research Use Only. Not For Use In Diagnostic Procedures.

SPECIFICITY

The CD10 antigen is referred to as the Common Acute Lymphoblastic Leukemia Antigen (CALLA) (1, 2). It is a type II integral membrane protein of 100 kDa, identified as the human membrane-associated neutral endopeptidase (EC3.4.24.11) (3, 4). It is expressed on uncommitted lymphoid precursors. CD10 expression is lost as cells enter the T lineage. In the B lineage, CD10 expression is lost later in ontogeny, as cells acquire surface Ig expression. It is also expressed on activated and proliferating B cells in the germinal center, and on neutrophils (6) as well as on bone marrow stromal cells. It is also expressed on a number of other cells of epithelial origin (5, 6).

The ALB1 mAb was studied during the first International Workshop on Human Leucocyte Differentiation Antigens held in Paris, France, in 1984 (7).

REAGENT

IOTest CD10-APC Conjugated Antibody
PN IM3633 – 100 tests – Liquid - 10 µL/test

Clone	ALB1
Isotype	IgG1, mouse
Immunogen	Human leukemia cells
Hybridoma	Myeloma x63 Ag 8.653 x Balb/c
Source	Ascites fluid
Purification	Affinity chromatography on protein A
Conjugation	Allophycocyanin (APC) is
Molar Ratio	APC / Ig.0.5 – 1.5
Fluorescence	Excites at 633 – 635 nm Emits at 660 nm

Limitation: APC conjugates are recommended for use only on flow cytometers equipped with an exciting source of 633 nm (He-Ne laser) or 635 nm (Red diode laser).

REAGENT CONTENTS

This antibody is provided in phosphate-buffered saline pH 7.4, containing 0.1% sodium azide and 2 mg/mL bovine serum albumin.

APPLICATION

Study of CD10- expressing cells by flow cytometry. Study of CD10 expression during hematopoiesis

STATEMENTS OF WARNING

1. This reagent contains 0.1% sodium azide. Sodium azide under acid

conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.

2. Specimens, samples and all material coming in contact with them should be handled as if they might transmit infection and disposed of with proper precautions.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes
4. Do not use antibody beyond the expiration date on the label.
5. Do not expose reagents to strong light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use good laboratory practises when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C in the dark. Do not freeze.

REAGENT PREPARATION

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

PROCEDURE

This reagent is designed for Flow Cytometry. Assay volume: 10 µL per 5 x 10⁵ cells in one test, or per 100 µL whole blood. A wash is required to yield optimal results.

SELECTED RESEARCH REFERENCES

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5. Braun, Martin, P.J., Ledbetter, J.A., Hansen, J.A., "Granulocytes and cultured human fibroblasts express common acute lymphoblastic leukemia-associated antigens", 1983, Blood, 61, 718-725.
6. Metzgar, R.S., Borowitz, M.J., Jones, N.H., Dowell, B.L., "Distribution of common acute lymphoblastic leukemia antigen in nonhematopoietic tissues", 1981, J. Exp. Med., 154, 1249-1254.
7. Boucheix, C., Perrot, J.Y., Mirshahi, M., Fournier, N., Billard, M., Giannoni, F., Bernadou, A., Rosenfeld, C., "Monoclonal antibodies against acute lymphoblastic leukemia differentiation antigens", 1984, Leucocyte Typing I, Bernard, A. et al., Springer Verlag, 671-672.

TRADEMARKS AND PATENTS

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