

MONOCLONAL ANTIBODY CD 37

Cat. No.	Form	Quantity	Presentation
0110	Purified	0.2 mg	Freeze-dried
0267	Biotin	0.2 mg	Freeze-dried
0456	Purified	100 tests	Liquid 2 ml
0457	FITC	100 tests	Liquid 2 ml
0458	Phycoerythrin	100 tests	Liquid 2 ml

Clone BL14

Isotype IgG1 (mouse)

Immunogen Human B-CLL lymphocytes

Hybridoma Myeloma SP2/o Ag.1-4 x Balb/c spleen cells

Specificity The molecular weight of the recognized antigen is 40-45 kDa.

CD37 is strongly expressed on the surface of human peripheral blood B cells and on B cells from the germinal center in lymph nodes.

In the ontogeny of the B cells, CD37 appears at a late stage, but it is not expressed on plasma cells.

A main feature of CD37 is its high content of carbohydrate (45%).

CD37 has a very low but significant reactivity with T cells, granulocytes, and monocytes.

Extensive immunohistochemical studies show a weak reactivity with other cellular types such as Langerhans cells, macrophages, endothelial cells, glial cells, and neurons from the central nervous system.

Applications Characterization and enumeration of human peripheral blood B cells.

Studies show that identification of CD37+ cells can be useful in the characterization leukemia or lymphoma.

Buffer Freeze-dried forms: 1 mg/ml bovine serum albumin in phosphate buffered saline.

Liquid forms: 2 mg/ml bovine serum albumin in phosphate buffered saline containing 0.1% sodium azide.

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Reconstitution and Storage

The freeze-dried form may be stored at 2-8°C until the expiration date. Reconstitute with 1 ml of distilled water. No preservative has been added. The reconstituted form may be stored at -20°C until the expiration date. Aliquotting is suggested to avoid multiple freeze-thaw cycles. The addition of sodium azide at 0.1% (w/v) is recommended for storage of the reconstituted form for up to one month at 2-8°C.

The purified liquid form should be stored at 2 - 8°C.

Conjugated forms should not be frozen and should be stored in the dark at 2 - 8°C.

Recommended Procedures

Fluorescent microscopy or flow cytometry:

Liquid form: 20 µl/5x10⁵ cells/test or 100 µl whole blood.

Freeze-dried form: 2 µg/5x10⁵ cells/test.

Immunohistochemistry:

Suggested form: freeze-dried.

Working dilution: 1:25 to 1:50.

This antibody is only suitable on frozen sections or cell smears.

References

- 1) Brochier, J., Magaud, J.P. & Cordier, G., 1983, J. Immunol. Methods, **58**, M3.
- 2) Schwartz, R., Moldenhauer, G. & Dorken, B., 1987, Immunobiology Today, **8**, 10, 308-315.
- 3) Gentilhomme, O., Berger, F. & Magaud, J.P., 1987, in Leucocyte Typing III White Cell Differentiation Antigens, 341-345.
- 4) Poncelet, P., Cantaloube J.F, Delor P., Duperray C., and Lafabre-Bertrand T. "Quantitative expression of CD37 the new 40-45 kDa cluster on B and T cells", Leucocyte Typing III 341-345.
- 5) This antibody was studied at the Human Leucocyte Workshop in Boston (1984) and Oxford (1986).