

MONOCLONAL ANTIBODY CD11c

Cat. No.	Form	Quantity	Presentation
0712	Purified	0.2 mg	Freeze-dried
1760	Phycoerythrin	100 tests	Liquid 2 ml

Clone BU15

Isotype IgG1

Immunogen Dendritic cells from synovial fluid.

Hybridoma Myeloma NS1/Ag 4.1 x Balb/c spleen cells.

Specificity The molecular weight of the recognized antigen is 150 kDa.
 The CD11c antigen is a member of the diverse family of heterodimeric intercellular and cell-matrix adhesion receptors termed integrins (1).
 Several subfamilies exist, each distinguished by a common α chain. A series of structurally related α chains noncovalently linked to the common β chain constitute the members of each family.

The CD11c antigen is the integrin α X subunit noncovalently associated with the leukocyte-restricted integrin β 2 (CD18). It has been reported as the complement receptor type 4 (CR4).

The CD11c antigen is expressed by tissue macrophages in most types of tissues, by monocytes and weakly expressed by granulocytes (2). It is also present on NK cells, activated T and B lymphocytes and dendritic cells.

CD11c expression has been reported in B-cell chronic lymphocytic leukemia and on hairy leukemia cells (3-6).

The CD11c antigen is involved in the adherence of PMN and monocytes to endothelium and in the binding of iC3b opsonized particles.

Applications Flow cytometry.
 Fluorescent microscopy.
 Immunohistochemistry.

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 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 μ l/5x10⁵ cells/test or 100 μ l whole blood

Freeze-dried form: 2 μ g/5x10⁵ cells/test

Immunohistochemistry:

Working dilution: 1:50 to 1:100.

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

References

- 1) Stoolman, M., "Adhesion molecules controlling lymphocyte migration", 1989, Cell, **56**, 907-910.
- 2) Hogg, N., Horton, M., "Myeloid antigens: new and previously defined clusters", 1987, Leucocyte Typing III, A.J., McMichael Editor, Oxford University Press.
- 3) Wormsley, S.B., Baird, S.M., Gadol, N., Rai, K.R., Sobol, R.E., "Characteristics of CD11c+CD5+ chronic B-cell leukemias and the identification of novel peripheral blood B-cell subsets with chronic lymphoid leukemia immunophenotypes", 1990, Blood, **76** (1), 123-130.
- 4) Hanson, C.A., Gribbin, T.E., Schnitzer, B., Schlegelmich, J.A., Mitchell, B.S., Stoolman, L.M., "CD11c (Leu-M5) expression characterizes a B-cell chronic lymphoproliferative disorder with features of both chronic lymphocytic leukemia and hairy cell leukemia", 1990, Blood, **76** (1), 2360-2367.
- 5) Palutke, M., Tabaczka, P., Gingrich, D., "CD11c expression in chronic lymphocytic leukemia", 1992, Blood, **80**, 2685.
- 6) Molica, S., Dattilo, A., Manella, A., "CD11c expression in B-cell chronic lymphocytic leukemia" 1993, Blood, **81** (9) 2466.