

## Bi-Test™ CD5 FITC - CD19 PE

**Product:** Anti-human CD5 FITC T cell Monoclonal Antibody and Anti-human CD19 PE B Lymphocytes Monoclonal Anitbody.

**Description:** Identification of CD5 human T cells expressing the 67,000 M.W. surface antigen, 85% peripheral blood lymphocytes that form rosettes with sheep red blood cells (E+) and a small subset of B cells. Identification of CD19 PE human B cells associated approximately 10% of peripheral blood lymphocytes expressing the 95,000 M.W. surface antigen.

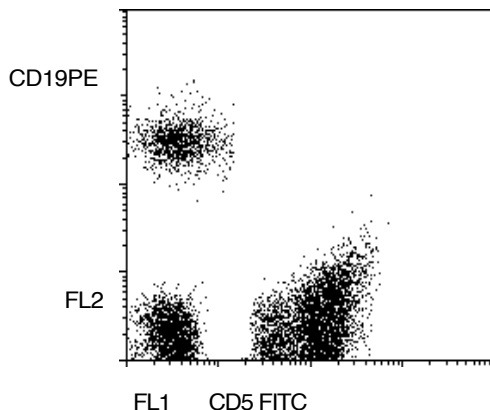
**Isotypes:** Mouse IgG-2a kappa (FITC) and Mouse IgG-1 kappa.(PE)

**Clones:** M 28623 (CD5 FITC) and 1G9 (CD19 PE).

**Applications:** Monitoring of T cells subsets in peripheral blood; Characterization of subtypes of T cell leukemias and lymphomas; Analysis of B cell subsets; Study of B cell activation; Study of B cell neoplasms.

**Use: PBMC:** Add10 µl of MAB/10<sup>6</sup> PBMC in 100 µl PBS. Mix gently and incubate for 15 minutes at 2<sup>0</sup> to 8<sup>0</sup>C. Wash twice with PBS and analyze or fix with 0.5% v/v of paraformaldehyde in PBS and analyze.

**WHOLE BLOOD:** Add10 µl of MAB/100 µl of whole blood. Mix gently and incubate for 15 minutes at room temperature 20<sup>0</sup>C. Lyse the whole blood. Wash once with PBS and analyze or fix with 0.5% v/v of paraformaldehyde in PBS and analyze. See instrument manufacturer's instructions for Lysed Whole Blood and Immunofluorescence analysis with a flow cytometer or microscope.



Legend: Peripheral Blood Lymphocytes Stained with Exalpha's Bi-Test CD5 FITC - CD19 PE Two Color Staining Kit.

**Storage:** Antibodies are supplied in PBS, 0.08% sodium azide and 0.2% protein carrier for FITC and PE. Antibodies should be stored at 4-8<sup>0</sup>C. Monoclonal antibodies should not be frozen. Reagents are stable for the period shown on the vial label when stored properly.

Ordering Information:	Form	Vial Size	Catalog #
	Bi-Test™	50 Test	0519S
	B-Test™	100 Test	0519

**For research use only. Not for use in human diagnostics or therapeutics.**

Exalpha Biologicals, Inc., 2 Shaker Rd, #B101, Shirley, MA 01464  
Tel: 800.395.1137 or 978.425.1370, Fax: 866.924.5100 or 978.425.1376, Web: [www.exalpha.com](http://www.exalpha.com)

## REFERENCES:

1. Anti-DNA Antibody Production by CD5+ and CD5- B Cells of Patients with Systemic Lupus Erythematosus. Suzuki,N., Sakane, T., Engleman, E.G.. J. Clin. Invest. 1990 Ja;85(1):238-47.
2. Characteristics of CD11c+ CD5+ Chronic B cell Leukemias and the Identification of Novel Peripheral Blood B cell Subsets with Chronic Lymphoid Leukemia Immunophenotypes. Wormsley ,S.B., Baird, S.M., Gadol, N., Rai K.R., Sobol,R.E.. Blood 1990 July. 76(1):123-30.
3. Stimulation of CD5 Enhances Signal Transduction by the T cell Antigen Receptor. Imboden, J.B., June, C.H., McCutcheon, M.A., Ledbetter ,J.A.. J. Clin. Invest. 1990 Ja; 85(1):130-4
4. Surface Immunoglobulin Ligands and Cytokines Differentially Affect Proliferation and Antibody Production by Human CD5+ and CD5- B Lymphocytes. Nawata, Y., Stall, A.M., Herzenberg, L.A., Eugui, E.M., Allison,A.C., Int. Immunol. 1990;2(7):603-14
5. Evidence for Differential Responsiveness of Human CD5+ and CD5- B cell Subsets to T Cell Independent Mitogens. Zupo, S., Dono, M., .Azzoni ,L., Chiorazzi, N., Ferrarini, M.. Eur. J. Immunol. 1991 Fe. 21(2):351-9
6. Functional Properties of CD19+ B Lymphocytes Positively Selected from Buffy Coats by Immunomagnetic Separation. Funderud, S., Erikstien, B., Asheim, H.C., Nustad ,K., Stokke, T., Blomhoff, H.K., Holte, H., Smeland, E.B.. Eur. J. Immunol. 1990 Ja;20(1):201-6
7. Thymic B Cells from Myasthenia Gravis Patients are Activated B Cells. Phenotypic and Functional Analysis. Leprince, C., Cohen-Kaminsky, S., Berrih-Aknin, S., Vernet-Der Garabedian, B., Treton, D., Galanaud, P., Richard, Y., J. Immunol. 1990 Oct., 145(7):2115-22.
8. Prognostic Significance of CD34 Expression in Childhood B Precursor Acute Lymphocytic Leukemia: A Pediatric Oncology Group Study. Borowitz, M.J., Shuster, J.J., Civin, C.I., Carrol, A.J., Look, A.T., Behm, F.G., Land, V.J., Pullen, D.J., Crist, W.M.. J. Clin. Onol. 1990 Au;8(8):1389-98.
9. Biphenotypic Acute Leukemia in Adults. Sulak, L.E., Clare, C.N., Morale, B.A., Hansen, K.L., Montiel, M.M.. Am. J. Clin. Path. 1990 Ju;94(1):54-8.
10. Intersection of the Complement and Immune Systems: A Signal Transduction Complex of the B Lymphocyte Containing Complement Receptor type 2 and CD19. Matsumoto, A.K., Kopicky-Burd , J., Carter, R.H., Tuveson, D.A., Tedder, T.F., Fearon, D.T., J. Exp. Med. 1991 Jan. 173(1):55-64.

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