



## Bi-Test™ CD10 FITC - CD19 PE

**Product:** Anti-human CD10 FITC Common Acute Lymphoblastic Antigen (CALLA) Monoclonal Antibody and Anti-human CD19 PE B Lymphocytes Monoclonal Antibody.

**Description:** Anti-hCD10 recognizes a human common acute lymphoblastic antigen (CALLA), MW 100 kDa. The CD10 antigen is identical to human membrane-associated neutral endopeptidase (NEP; EC 3.3.24.11), also known as enkephalinase. The CD10 antigen is found on lymphocytes from patients with acute B-lymphoid leukemia. The antigen is also present on a wide variety of normal and neoplastic cell types including renal epithellum, fibroblasts, granulocytes and some lymphoma, melanoma and glioma cell lines. Identification of CD19 PE human B cells associated approximately 10% of peripheral blood lymphocytes expressing the 95,000 M.W. surface antigen.

**Isotype:** Mouse IgG1 kappa (FITC) and Mouse IgG1 kappa (PE)

**Clones:** RXB.14 (CD10 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; Monitoring of B cells in peripheral blood.

**Use:** PBMC: Add 10 µl of MAB/10<sup>6</sup> PBMC in 100 µl PBS. Mix gently and incubate for 15 minutes at 2<sup>o</sup> to 8<sup>o</sup>C. Wash twice with PBS and analyze. WHOLE BLOOD: Add 10 µl of MAB/100 µl of whole blood. Mix gently and incubate for 15 minutes at room temperature 20<sup>o</sup>C. Lyse the whole blood. Wash once with PBS and analyze. See instrument manufacturer's instructions for Lysed Whole Blood and Immunofluorescence analysis with a flow cytometer or microscope.

**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>o</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	1019S
	Bi-Test™	100 Test	1019

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

## REFERENCES:

1. CD10/Neutral Endopeptidase 24.11 Hydrolyzes Bombesin-like Peptides and Regulates the Growth of Small Cell Carcinomas of the Lung. Proc Natl Acad Sci USA 1991, Dec1;88(23):10662-6. Shipp, MA, Tarr, GE; Chen, CY; Switzer, SN; Hersh, LB; Stein,H; Sunday, ME; Reinherz, EL.
2. Induction of Isotype Switching and Ig Production by CD5+ and CD10+ Human Fetal B Cells. JI, 1992, Jun1;148(11):3398-404. Punnonen, J; Aversa, GG; Vandekerckhove, B; Roncarolo, MG; de Vries, JE.
3. Murine Common Acute Lymphoblastic Leukemia Antigen (CD10 Neutral Endopeptidase 24.11). Molecular Characterization, Chromosomal Localization and Modeling of the Active Site. JI, 1992, May1;148(9):2817-25. Chen, CY; Salles, G; Seldin, MF; Kister, AE; Reinherz, EL; Shipp, MA.
4. Childhood Acute Leukemia with t(11;19) (q23;p13). SO. Leukemia, 1991, Dec;5(12):1064-8. Hudson, MM; Raimondi, SC; Behm, FG; Pui, CH.
5. CD10 (CALLA)/Neutral Endopeptidase 24.11 Modulates Inflammatory Peptide-Induced Changes in Neutrophil Morphology, Migration and Adhesion Proteins and is itself Regulated by Neutrophil Activation. Blood, 1991, Oct. 1;78(7):1834-41. Shipp, MA; Stefano, GB; Switzer, SN; Griffin, JD; Reinherz, EL.
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.

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

Exalpha Biologicals, Inc., 86 Rosedale Rd. Watertown, MA 02472  
Tel: 800.395.1137 or 617.924.3400, Fax: 866.924.5100 or 617.924.5100, Web:www.exalpha.com