



T8-663-T100

## Monoclonal Antibody to CD19 PE-Cy™5 conjugated (100 tests)

<b>Clone:</b>	4G7
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The mouse monoclonal antibody 4G7 recognizes CD19 (B4), a 95 kDa type I transmembrane glycoprotein of immunoglobulin superfamily, expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells. WS Code: 2 B43
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	Human CCL (chronic lymphocytic leukemia) cells
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with tandem dye PE-Cy™5 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD19 is a transmembrane glycoprotein of Ig superfamily expressed by B cells from the time of heavy chain rearrangement until plasma cell differentiation. It forms a tetrameric complex with CD21 (complement receptor type 2), CD81 (TAPA-1) and Leu13. Together with BCR (B cell antigen receptor), this complex signals to decrease B cell treshold for activation by the antigen. Besides being signal-amplifying coreceptor for BCR, CD19 can also signal independently of BCR coligation and it turns out to be a central regulatory component upon which multiple signaling pathways converge. Mutation of the CD19 gene results in hypogammaglobulinemia, whereas CD19 overexpression causes B cell hyperactivity.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Leukocyte Typing II., Reinherz E.L. et al. (Eds.), Springer-Verlag (1985).
- \*Muench MO, Roncarolo MG, Namikawa R: Phenotypic and functional evidence for the expression of CD4 by hematopoietic stem cells isolated from human fetal liver. *Blood*. 1997 Feb 15;89(4):1364-75.
- \*Stockmeyer B, Dechant M, van Egmond M, Tutt AL, Sundarapandiyam K, Graziano RF, Repp R, Kalden JR, Gramatzki M, Glennie MJ, van de Winkel JG, Valerius T: Triggering Fc alpha-receptor I (CD89) recruits neutrophils as effector cells for CD20-directed antibody therapy. *J Immunol*. 2000 Nov 15;165(10):5954-61.
- \*Dubois B, Massacrier C, Caux C: Selective attraction of naive and memory B cells by dendritic cells. *J Leukoc Biol*. 2001 Oct;70(4):633-41.
- \*Basu S, Lynne CM, Ruiz P, Aballa TC, Ferrell SM, Brackett NL: Cytofluorographic identification of activated T-cell subpopulations in the semen of men with spinal cord injuries. *J Androl*. 2002 Jul-Aug;23(4):551-6.
- \*Köller M, Zwölfer B, Steiner G, Smolen JS, Scheinecker C: Phenotypic and functional deficiencies of monocyte-derived dendritic cells in systemic lupus erythematosus (SLE) patients. *Int Immunol*. 2004 Nov;16(11):1595-604.
- \*Treusch M, Vonthein R, Baur M, Günaydin I, Koch S, Stübiger N, Eckstein AK, Peter HH, Ness T, Zierhut M, Kötter I: Influence of human recombinant interferon-alpha2a (rhIFN-alpha2a) on altered lymphocyte subpopulations and monocytes in Behcet's disease. *Rheumatology (Oxford)*. 2004 Oct;43(10):1275-82.
- \*Porcellini S, Vallanti G, Nozza S, Poli G, Lazzarin A, Tambussi G, Siccardi AG, Grassi F: Improved thymopoietic potential in aviremic HIV infected individuals treated with HAART by intermittent IL-2 administration. *AIDS*. 2003 Jul 25;17(11):1621-30.
- \*Andersen P, Pedersen MW, Woetmann A, Villingshøj M, Stockhausen MT, Odum N, Poulsen HS: EGFR induces expression of IRF-1 via STAT1 and STAT3 activation leading to growth arrest of human cancer cells. *Int J Cancer*. 2008 Jan 15;122(2):342-9.
- \*Martino V, Tonelli R, Montemurro L, Franzoni M, Marino F, Fazzina R, Pession A: Down-regulation of MLL-AF9, MLL and MYC expression is not obligatory for monocyte-macrophage maturation in AML-M5 cell lines carrying t(9;11)(p22;q23). *Oncol Rep*. 2006 Jan;15(1):207-11.
- \*And many other.

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