



T7-663-T025

Monoclonal Antibody to CD19 PE-Cy[™]7 conjugated (25 tests)

Clone: 4G7

Isotype: Mouse IgG1

Specificity: 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

Regulatory Status: RUO

Immunogen: Human CCL (chronic lymphocytic leukemia) cells

Species Reactivity: Human

Preparation: The purified antibody is conjugated with tandem dye PE-Cy™7 under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: 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.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD19 is a transmembrane glycoprotein of lg 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.



PRODUCT DATA SHEET

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, Sundarapandiyan 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.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

 $\mathsf{Cy}^{\intercal}\!\mathsf{M}$ and $\mathsf{Cy}\mathsf{Dye}^{\intercal}\!\mathsf{M}$ are registered trademarks of GE Healthcare.