



PO-663-T025

## Monoclonal Antibody to CD19 Pacific Orange™ conjugated (25 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 Pacific Orange™ 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 (0.1 ml) is sufficient for 25 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 threshold 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.

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](http://www.exbio.cz).

This product is provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Exbio Praha, a.s., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity), including use in flow cytometry that does not utilize a bead based array, but excluding use in combination with microarrays or High Content Screening. The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

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

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic  
Tel: +420 261 090 666 | Fax: +420 261 090 660 | [orders@exbio.cz](mailto:orders@exbio.cz) | [www.exbio.cz](http://www.exbio.cz)