

PB-305-T025

Monoclonal Antibody to CD19 Pacific Blue™ conjugated (25 tests)

Clone:	LT19
Isotype:	Mouse IgG1
Specificity:	The antibody LT19 reacts with CD19 (B4), a 95 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells. HLDA 10
Regulatory Status:	RUO
Immunogen:	Daudi human Burkitt lymphoma cell line
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Pacific Blue™ 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 ⁶ 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 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:**

- *Fujimoto M, Poe JC, Jansen PJ, Sato S, Tedder TF: CD19 amplifies B lymphocyte signal transduction by regulating Src-family protein tyrosine kinase activation. *J Immunol.* 1999 Jun 15;162(12):7088-94.
- *Inabe K, Kurosaki T: Tyrosine phosphorylation of B-cell adaptor for phosphoinositide 3-kinase is required for Akt activation in response to CD19 engagement. *Blood.* 2002 Jan 15;99(2):584-9.
- *van Zelm MC, Reisli I, van der Burg M, Castaño D, van Noesel CJ, van Tol MJ, Woellner C, Grimbacher B, Patisson PJ, van Dongen JJ, Franco JL: An antibody-deficiency syndrome due to mutations in the CD19 gene. *N Engl J Med.* 2006 May 4;354(18):1901-12.
- *Shi X, Xie C, Chang S, Zhou XJ, Tedder T, Mohan C: CD19 hyperexpression augments Sle1-induced humoral autoimmunity but not clinical nephritis. *Arthritis Rheum.* 2007 Sep;56(9):3057-69.
- *Elias F, Flo J, Lopez RA, Zorzopulos J, Montaner A, Rodriguez JM: Strong cytosine-guanosine-independent immunostimulation in humans and other primates by synthetic oligodeoxynucleotides with PyNTTTTGT motifs. *J Immunol.* 2003 Oct 1;171(7):3697-704.
- *Lin CW, Liu TY, Chen SU, Wang KT, Medeiros LJ, Hsu SM: CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features. *Blood.* 2005 Nov 15;106(10):3567-74. Epub 2005 Jul 26.
- *Stehlíková O, Chovancová J, Tichý B, Krejčí M, Brychtová Y, Panovská A, Francová Skuhrová H, Burčková K, Borský M, Loja T, Mayer J, Pospíšilová S, Doubek M: Detecting minimal residual disease in patients with chronic lymphocytic leukemia using 8-color flow cytometry protocol in routine hematological practice. *Int J Lab Hematol.* 2013 Sep 13. doi: 10.1111/ijlh.12149.
- *Kayserova J, Vcelakova J, Stechova K, Dudkova E, Hromadkova H, Sumnik Z, Kolouskova S, Spisek R, Sediva A: Decreased dendritic cell numbers but increased TLR9-mediated interferon-alpha production in first degree relatives of type 1 diabetes patients. *Clin Immunol.* 2014 Jul;153(1):49-55.

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.

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 | www.exbio.cz