

## Monoclonal Antibody to CD19 - Purified

<b>Alternate names:</b>	B-cell marker, B-lymphocyte surface antigen B4, Differentiation antigen CD19, Leu-12
<b>Catalog No.:</b>	SM1529PS
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<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.
<b>Uniprot ID:</b>	<a href="#">P15391</a>
<b>NCBI:</b>	<a href="#">NP_001171569.1</a>
<b>GeneID:</b>	<a href="#">930</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	LT19
<b>Immunogen:</b>	Daudi human Burkitt lymphoma cell line.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction (> 95% pure by SDS-PAGE) <b>Purification:</b> DEAE-Chromatography and Precipitation Methods. <b>Buffer System:</b> PBS, pH 7.4 containing 15 mM Sodium Azide as preservative
<b>Applications:</b>	<b>Immunoprecipitation.</b> <b>Immunohistochemistry on Frozen Sections.</b> <b>Flow Cytometry:</b> 5 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Clone 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.
<b>Species Reactivity:</b>	<b>Tested:</b> Human
<b>Storage:</b>	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General References:</b>	1. 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

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

Jun 15;162(12):7088-94.

2. 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.

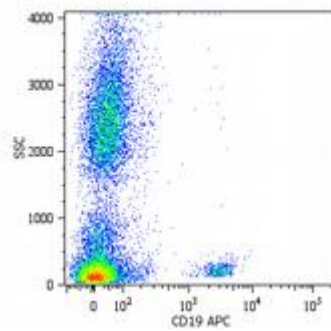
3. van Zelm MC, Reisli I, van der Burg M, Castao D, van Noesel CJ, van Tol MJ, Woellner C, Grimbacher B, Patio PJ, van Dongen JJ, Franco JL: An antibody-deficiency syndrome due to mutations in the CD19 gene. *N Engl J Med*. 2006 May 4;354(18):1901-12.

4. 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.

5. 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.

6. 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.

**Pictures:**



Surface staining of human peripheral blood cells with anti-human CD19 (LT19) APC.

---

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)