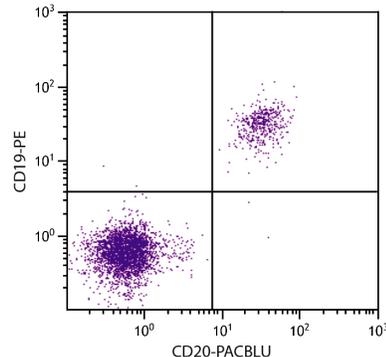




Mouse Anti-Human CD20

Cat. No.	Format	Size
9350-01	Purified (UNLB)	0.1 mg
9350-02	Fluorescein (FITC)	100 tests
9350-02S	Fluorescein (FITC)	25 tests
9350-08	Biotin (BIOT)	100 tests
9350-09	R-phycoerythrin (PE)	100 tests
9350-09S	R-phycoerythrin (PE)	25 tests
9350-11	Allophycocyanin (APC)	100 tests
9350-11S	Allophycocyanin (APC)	25 tests
9350-13	Spectral Red® (SPRD)	100 tests
9350-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	100 tests
9350-19	Allophycocyanin-Cyanine 7 (APC/CY7)	100 tests
9350-26	Pacific Blue™ (PACBLU)	100 tests
9350-27	Alexa Fluor® 700 (AF700)	100 tests
9350-30	Alexa Fluor® 488 (AF488)	100 tests
9350-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD20-PACBLU (SB Cat. No. 9350-26) and Mouse Anti-Human CD19-PE (SB Cat. No. 9340-09).

Overview

Clone	B-Ly1
Isotype	Mouse IgG _{1κ}
Immunogen	Unknown
Specificity	Human CD20; Mr 33-37 kDa
Alternate Name(s)	Leu-16, B1, Bp35, MS4A1, S7
Workshop	IV B202

Description

CD20 is a 33-37 kDa unglycosylated phosphoprotein. Although not a member of the tetraspanin superfamily of cell surface receptors, it crosses the cell membrane four times. It is expressed on all stages of B cell differentiation except plasma cells. The CD20 molecule is involved in regulation of B cell differentiation presumably via its reported function as a Ca⁺⁺ channel subunit.

Applications

FC – Quality tested ^{5,6,8,9}
 IHC-FS – Reported in literature ^{1,2}
 IHC-PS – Reported in literature ³
 IP – Reported in literature ⁴
 Block – Reported in literature ⁵
 Sep – Reported in literature ⁶
 Cyto – Reported in literature ⁷

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 μg/10 ⁶ cells
	FITC, BIOT, PE, APC, SPRD, PE/CY7, APC/CY7, PACBLU, AF488, AF647, and AF700 conjugates	10 μL/10 ⁶ cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL.

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Kang YM, Zhang X, Wagner UG, Yang H, Beckenbaugh RD, Kurtin PJ, et al. CD8 T cells are required for the formation of ectopic germinal centers in rheumatoid synovitis. *J Exp Med.* 2002;195:1325-36. (IHC-FS)
2. Yoon S, Zhang X, Lee IY, Spencer N, Vo P, Choi YS. CD9 is a novel marker for plasma cell precursors in human germinal centers. *Biochem Biophys Res Commun.* 2013;431:41-6. (IHC-FS)
3. Yang M, Xu Z, Zhuang Z. Macrophages affect immune inflammation and proliferation in benign prostatic hyperplasia via androgen receptor and CD40/CD40L signaling pathway. *Tissue Cell.* 2020;64:101343. (IHC-PS)
4. Dörken B, Möller P, Pezzutto A, Schwartz-Albiez R, Moldenhauer G. B-cell antigens: CD20. In: Knapp W, Dörken B, Gilks WR, Rieber EP, Schmidt RE, Stein H, et al, editors. *Leukocyte Typing IV: White Cell Differentiation Antigens.* Oxford: Oxford University Press; 1989. p. 46-48. (IP)
5. Tedder TF, Penta A. Structure of the CD20 antigen and gene of human and mouse B-cells: use of transfected cell lines to examine the workshop panel of antibodies. In: Knapp W, Dörken B, Gilks WR, Rieber EP, Schmidt RE, Stein H, et al, editors. *Leukocyte Typing IV: White Cell Differentiation Antigens.* Oxford: Oxford University Press; 1989. p. 48-50. (FC, Block)
6. Pawelec G, Müller R, Rehbein A, Hähnel K, Ziegler BL. Extrathymic T cell differentiation in vitro from human CD34⁺ stem cells. *J Leukoc Biol.* 1998;64:733-9. (FC, Sep)
7. Mössner E, Brünker P, Moser S, Püntener U, Schmidt C, Herter S, et al. Increasing the efficacy of CD20 antibody therapy through the engineering of a new type II anti-CD20 antibody with enhanced direct and immune effector cell-mediated B-cell cytotoxicity. *Blood.* 2010;115:4393-402. (Cyto)
8. Odendahl M, Jacobi A, Hansen A, Feist E, Hiepe F, Burmester GR, et al. Disturbed peripheral B lymphocyte homeostasis in systemic lupus erythematosus. *J Immunol.* 2000;165:5970-9. (FC)
9. Odendahl M, Keitzer R, Wahn U, Hiepe F, Radbruch A, Dörner T, et al. Perturbations of peripheral B lymphocyte homeostasis in children with systemic lupus erythematosus. *Ann Rheum Dis.* 2003;62:851-8. (FC)

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Spectral Red® is a PE/CY5 tandem conjugate.

Cy® is a registered trademark of GE Healthcare.

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