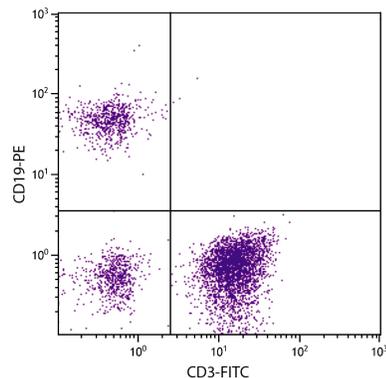




Mouse F(ab')₂ Anti-Human CD19

Cat. No.	Format	Size
9342-01	Purified (UNLB)	0.1 mg
9342-02	Fluorescein (FITC)	100 tests
9342-09	R-phycoerythrin (PE)	100 tests



Human peripheral blood lymphocytes were stained with Mouse F(ab')₂ Anti-Human CD19-PE (SB Cat. No. 9342-09) and Mouse Anti-Human CD3-FITC (SB Cat. No. 9515-02).

Overview

Clone	SJ25-C1
Isotype	Mouse (BALB/c) F(ab') ₂ IgG ₁ κ
Immunogen	NALM-1 and NALM-16 leukemia cell line
Specificity	Human CD19; Mr 95 kDa
Alternate Name(s)	B4, B-lymphocyte antigen, Leu-12
Workshop	II L17; III 073, 734

Description

CD19 is a type I transmembrane glycoprotein and a member of the immunoglobulin superfamily. It is expressed at all stages of B cell differentiation except terminally differentiated plasma cells. It is also present on the cell surface of follicular dendritic cells. CD19 associates with CD21, CD81, Leu 13 and/or MHC Class II molecules to form a signal transduction complex on the B cell surface. This signaling complex modulates the activation threshold for the B cell antigen receptor (BCR).

Applications

FC – Quality tested⁵⁻¹³
 IHC-FS – Reported in literature¹
 IP – Reported in literature²
 Block – Reported in literature^{3,4}

Working Dilutions

Flow Cytometry FITC and PE conjugates 10 μL/10⁶ 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.

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA Mailing Address: P.O. Box 26221 • Birmingham, AL 35260 • USA

Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • Fax: 205.945.8768

Email: info@southernbiotech.com • Website: www.southernbiotech.com

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 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- 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 (M)SDS.

References

1. Vuyyuru R, Liu H, Manser T, Alugupalli KR. Characteristics of *Borrelia hermsii* infection in human hematopoietic stem cell-engrafted mice mirror those of human relapsing fever. *Proc Natl Acad Sci USA*. 2011;108:20707-12. (IHC-FS)
2. Nadler LM. B cell/leukemia panel workshop: summary and comments. In: Reinherz EL, Haynes BF, Nadler LM, Bernstein ID, editors. *Leukocyte Typing II: Human B Lymphocytes*. New York: Springer-Verlag; 1986. p. 3-43. (IP)
3. Moldenhauer G, Dörken B, Schwartz R, Pezzutto A, Knops J, Hämmerling GJ. Analysis of ten B lymphocyte-specific workshop monoclonal antibodies. In: Reinherz EL, Haynes BF, Nadler LM, Bernstein ID, editors. *Leukocyte Typing II: Human B Lymphocytes*. New York: Springer-Verlag; 1986. p. 61-7. (Block)
4. de Rie MA, Terpstra FG, van Lier RA, von dem Borne AE, Miedema F. Identification of functional epitopes on workshop-defined B-cell membrane molecules. In: McMichael AJ, Beverley PC, Cobbold S, Crumpton MJ, Gilks W, Gotch FM, et al, editors. *Leukocyte Typing III: White Cell Differentiation Antigens*. Oxford: Oxford University Press; 1987. p. 402-5. (Block)
5. 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)
6. 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)
7. Henneken M, Dörner T, Burmester G, Berek C. Differential expression of chemokine receptors on peripheral blood B cells from patients with rheumatoid arthritis and systemic lupus erythematosus. *Arthritis Res Ther*. 2005;7:R1001-13. (FC)
8. Shankar SP, Petrie TA, García AJ, Babensee JE. Dendritic cell responses to self-assembled monolayers of defined chemistries. *J Biomed Mater Res A*. 2010;92:1487-99. (FC)
9. Shankar SP, Babensee JE. Comparative characterization of cultures of primary human macrophages or dendritic cells relevant to biomaterial studies. *J Biomed Mater Res A*. 2010;92:791-800. (FC)
10. Chung BH, Kim KW, Sun IO, Choi SR, Park HS, Jeon EJ, et al. Increased interleukin-17 producing effector memory T cells in the end-stage renal disease patients. *Immunol Lett*. 2011;141:181-9. (FC)
11. Kim KW, Chung BH, Jeon EJ, Kim B, Choi BS, Park CW, et al. B cell-associated immune profiles in patients with end-stage renal disease (ESRD). *Exp Mol Med*. 2012;44:465-72. (FC)
12. Kim HY, Cho M, Jhun JY, Byun JK, Kim E, Yim YB, et al. The imbalance of T helper 17/regulatory T cells and memory B cells during the early post-transplantation period in peripheral blood of living donor liver transplantation recipients. *Immunology*. 2013;138:124-33. (FC)
13. Chung BH, Kim KW, Yu JH, Kim B, Choi BS, Park CW, et al. Decrease of immature B cell and interleukin-10 during early-post-transplant period in renal transplant recipients under tacrolimus based immunosuppression. *Transpl Immunol*. 2014;30:159-67. (FC)