Rat Anti-Mouse CD19

Overview

Clone: 6D5
Isotype: Rat (Lewis) IgG2a \(\gamma\)
Immunogen: Mouse CD19-expressing K562 human erythroleukemia cells
Specificity: Mouse CD19; Mr 95 kDa
Alternate Name(s): B4

Description

CD19 is a monomeric transmembrane glycoprotein expressed at relatively constant levels throughout B cell development from early pro-B/pre-B cells (i.e. B220+/CD43+/HSA+) through fully differentiated B cell stages. Terminally differentiated plasma cells do not express CD19. In humans, the CD19 molecule on the surface of mature B cells associates with CD21 (CR-2) and CD81 (TAPA-1), and this multimolecular complex synergizes with surface immunoglobulin to provide signal transduction and promote cellular activation. All splenic and peritoneal IgM+ cells of both B-1 and B-2 lineages are CD19+, with B-1 cells expressing higher levels of CD19 than B-2 cells in these sites. Studies with CD19-deficient mice have suggested that this molecule may not be required for normal generation and maturation of B cells in the bone marrow. The monoclonal antibody 6D5 recognizes the same epitope as the published clone, 1D3.

Applications

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Working Dilutions

Flow Cytometry: FITC, BIOT and AF488 conjugates ≤ 1 µg/10⁶ cells
PE, APC, SPRD, CY5, PE/CY5.5 and PE/CY7 conjugates ≤ 0.2 µg/10⁶ cells
PACBLU conjugate ≤ 0.3 µg/10⁶ cells
AF647 and AF700 conjugates ≤ 0.1 µg/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.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 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 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The allophycocyanin (APC), Spectral Red® (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7) and R-phycoerythrin-Cyanine 5.5 (PE/CY5.5) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. Aliquot and store at or below -20°C.
- The Cyanine 5 (CY5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700) and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 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 (M)SDS.

References

12. Personal communication (IP)

Spectral Red® is a registered trademark of Southern Biotechnology Associates, Inc.
Spectral Red™ is a PE/CY5 tandem conjugate.
Cy® is a registered trademark of GE Healthcare.
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