

Biotin Anti-Mouse CD19 (1D3) Antibody

Catalog # ATB10077

Specification

Biotin Anti-Mouse CD19 (1D3) Antibody - Product Information

Application Isotype Concentration Reactivity Formulation

Host

FC Rat IgG2a, kappa 0.5 mg/mL Mouse 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2 Rat

Biotin Anti-Mouse CD19 (1D3) Antibody - Additional Information

Gene ID Gene Name Alternative Name(s) Leu-12, B4 12478 Cd19

Format Biotin

Preparation

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

Application Notes

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

Storage Conditions 2-8°C protected from light

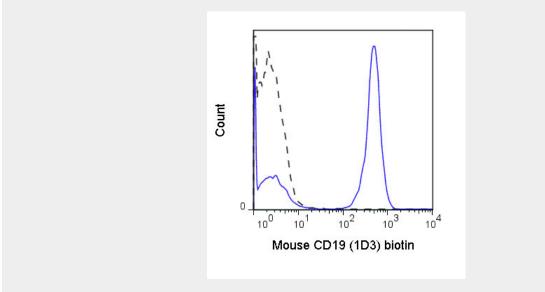
Biotin Anti-Mouse CD19 (1D3) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>



• <u>Cell Culture</u> Biotin Anti-Mouse CD19 (1D3) Antibody - Images



C57BI/6 splenocytes were stained with 0.125 ug Anti-Mouse CD19 Biotin (ATB10077) (solid line) or 0.125 ug Rat IgG2a Biotin isotype control (dashed line), followed by Streptavidin PE.

Biotin Anti-Mouse CD19 (1D3) Antibody - Background

The 1D3 antibody reacts with mouse CD19, a 95 kDa glycoprotein which acts as a co-receptor, along with CD21 and CD81, in support of the functional B cell receptor (BCR). This complex provides antigen-specific recognition and subsequent activation of B cells to proliferate and differentiate into antibody-secreting cells (plasma cells) or memory B cells, which are crucial for secondary antigen encounter. CD19 is a lineage-differentiation marker, as its expression is detectable at the earliest B cell stages, through development, and is finally lost upon transition to mature plasma cells. The 1D3 antibody is widely used as a phenotypic marker for CD19 expression on B cells, as well as on dendritic cell subsets.