

# APC Anti-Mouse CD19 (1D3) Antibody

Catalog # ATB10016

## **Specification**

# APC Anti-Mouse CD19 (1D3) Antibody - Product Information

Application FC

Isotype Rat IgG2a, kappa

Concentration 0.2 mg/mL Reactivity Mouse

Formulation 10 mM NaH2PO4, 150 mM NaCl, 0.09%

NaN3, 0.1% gelatin, pH7.2

Host Rat

## APC Anti-Mouse CD19 (1D3) Antibody - Additional Information

Gene ID 12478
Gene Name Cd19

**Alternative Name(s)** 

Leu-12, B4

**Format** 

**APC** 

#### **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

## APC Anti-Mouse CD19 (1D3) Antibody - Protocols

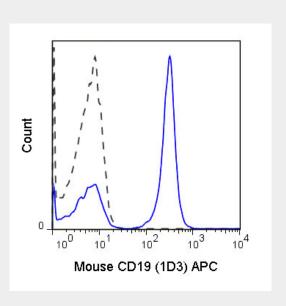
Provided below are standard protocols that you may find useful for product applications.

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

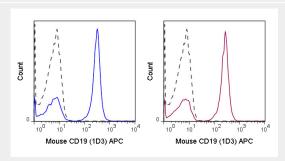


#### • Cell Culture

#### APC Anti-Mouse CD19 (1D3) Antibody - Images



C57Bl/6 splenocytes were stained with 0.125 ug Anti-Mouse CD19 APC (ATB10016) (solid line) or 0.125 ug Rat IgG2a APC isotype control (dashed line).



C57Bl/6 splenocytes were stained with 0.125 ug APC Anti-Mouse CD19 (1D3) manufactured by Tonbo Biosciences (left panel) or eBioscience (right panel).

# APC 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.