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redFluor™ 710 Anti-Mouse CD19 (1D3) Antibody

Catalog # ATB10384

Specification

redFluor™ 710 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**

redFluor™ 710 Anti-Mouse CD19 (1D3) Antibody - Additional Information

Gene ID	**12478**
Gene Name	**Cd19**

Alternative Name(s)
Leu-12, B4

Format
redFluor™ 710

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. redFluor™ 710 dye is excited by the red (633-647 nm) laser and has a peak emission of 710 nm. The recommended band pass filter for this dye is 710/50. redFluor™ 710 can be used as an alternative for Alexa Fluor® 700. Confirm that your cytometer is configured to detect this fluorochrome.

Storage Conditions
2-8°C protected from light

redFluor™ 710 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
- Immunohistochemistry

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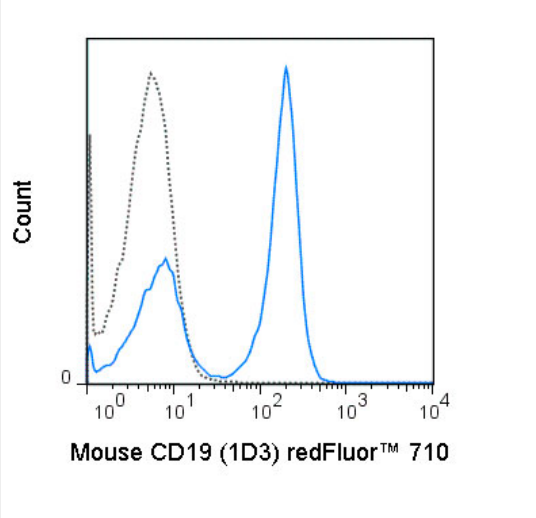
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

redFluor™ 710 Anti-Mouse CD19 (1D3) Antibody - Images



C57Bl/6 splenocytes were stained with 0.125 ug redFluor™710 Anti-Mouse CD19 (ATB10384) (solid line) or 0.125 ug redFluor™710 Rat IgG2a isotype control (dashed line).

redFluor™ 710 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.

redFluor™ 710 Anti-Mouse CD19 (1D3) Antibody - References

Ghosn EEB, Yamamoto R, Hamanada S, Yang Y, Herzenberg LA, Nakauchi H, and Herzenberg LA. 2012. Proc. Natl. Acad. Sci. 109:5394-5398. (Flow cytometry)Raghavan S, Ostberg AK, Flach C-F, Ekman A, Blomquist M, Czerkinsky C, and Holmgren J. 2010. Infect. Immun. 78(10)4251-4260. (Immunohistochemistry – acetone fixed tissue)Togayachi A, Kozono Y, Ikehara Y, Ito H, et al. 2010. Proc. Natl. Acad. Sci. 107:11900-11905. (Immunoprecipitation)Poitrasson-Riviere M, Bienvenu B, Le Campion A, Becourt C, Martin B, and Lucas B. 2008. J. Immunol. 180:7294-7304. (Immunohistochemistry – paraffin embedded tissue)Lee Y, Haas KM, Gor DO, Ding X, Karp DR, Greenspan NS, Poe JC, and Tedder TF. 2005. J. Immunol. 175:8011-8023. (Immunoprecipitation)Bobbitt KR and Justement LB. 2000. J. Immunol. 165: 5588-5596. (in vitro stimulation, Immunoprecipitation)