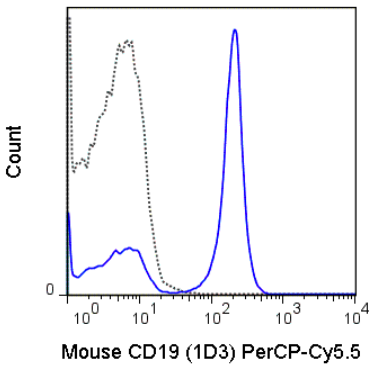
TECHNICAL DATA SHEET

PerCP-Cyanine5.5 Anti-Mouse CD19 (1D3)

Catalog Number: 65-0193

PRODUCT INFORMATION

Contents:	PerCP-Cyanine5.5 Anti-Mouse CD19 (1D3)
Isotype:	Rat IgG2a, kappa
Concentration:	0.2 mg/mL
Clone:	1D3
Reactivity:	Mouse
Use By:	6 months from date of receipt
Storage Conditions:	2-8°C protected from light
Formulation:	10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.125 ug PerCP-Cy5.5 Anti-Mouse CD19 (65 -0193) (solid line) or 0.125 ug PerCP-Cy5.5 Rat IgG2a isotype control (dashed line).

DESCRIPTION

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.

PREPARATION & STORAGE

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). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

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 – frozen 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)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.