

## TECHNICAL DATA SHEET

# Purified Anti-Mouse CD19 (1D3)

Catalog Number: 70-0193

## PRODUCT INFORMATION

**Contents:** Purified Anti-Mouse CD19 (1D3)

**Isotype:** Rat IgG2a, kappa

**Concentration:** 0.5 mg/mL

**Clone:** 1D3

**Reactivity:** Mouse

**Use By:** 12 months from date of receipt

**Storage Conditions:** 2-8°C

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, pH 7.2

## 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 preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

## APPLICATION NOTES

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

## REFERENCES

Ghosh 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.

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