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Technical Data Sheet

# Anti-Mouse CD19 BG Violet 450

Catalog Number :11212-40

RUO: For Research Use Only. Not for use in diagnostic procedures.

## Product Information

**Clone:** 1D3

**Format/Conjugate:** BG Violet 450

**Concentration:** 0.2 mg/mL

**Reactivity:** Mouse

**Laser:** Violet (405nm)

**Peak Emission:** 450nm

**Peak Excitation:** 404nm

**Filter:** 450/50

**Brightness (1=dim,5=brightest):** 2

**Isotype:** Rat IgG2a, kappa

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

## Description

The 1D3 monoclonal antibody specifically reacts with mouse CD19, a 95 kDa transmembrane glycoprotein, a member of the Ig superfamily and a B cell-lineage differentiation antigen expressed by all the B lymphocyte development stages, except for the terminally differentiated plasma cells.

CD19 associates with CD21, CD81 and MHC class II to form a multi-molecular complex that initiates the mature B lymphocyte activation by interaction with the B-cell receptors. CD 19 enhances the B cell proliferation, development and activation, and the maturation of memory B cells. In CD19-deficient mice, the generation and maturation of B lymphocytes in the bone marrow and periphery are affected.

BG Violet 450 conjugate is an alternative to the Pacific Blue, eFluor 450, or BD Horizon V450 dyes. It is excited by the violet (405 nm) laser, with a peak emission of 450nm.

## Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

## Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.5 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

## References

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2. Krop, I., De Fougerolles, A. R., Hardy, R. R., Allison, M., Schlissel, M. S., Fearon, D. T. (1996). Self-renewal of B-1 lymphocytes is dependent on

CD19.European journal of immunology,;26(1), 238-242.

3. Engel, P., Zhou, L. J., Ord, D. C., Sato, S., Koller, B., Tedder, T. F. (1995). Abnormal B lymphocyte delevopment, activation, and differentiation in mice that lack or overexpress the CD19 signal transduction molecule.;Immunity,;3(1), 39-50.

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