

TECHNICAL DATA SHEET

# violetFluor™ 500 Anti-Mouse CD45.2 (104)

Catalog Number: 85-0454

## PRODUCT INFORMATION

**Contents:** violetFluor™ 500 Anti-Mouse CD45.2 (104)

**Isotype:** Mouse IgG2a, kappa

**Concentration:** 0.2 mg/mL

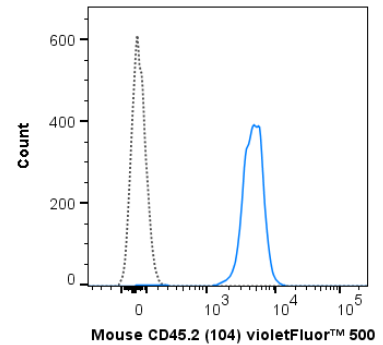
**Clone:** 104

**Reactivity:** Mouse

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

**Storage Conditions:** 2-8°C protected from light

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.5 ug violetFluor™ 500 Anti-Mouse CD45.2 (85-0454) (solid line) or 0.5 ug violetFluor™ 500 Mouse IgG2a isotype control (dashed line).

## DESCRIPTION

The 104 antibody reacts with mouse CD45.2, also known as Ly5.2, which is a strain-specific allelic form of the CD45 Leukocyte Common Antigen (LCA). Functionally, CD45 is a protein tyrosine phosphatase whose broad cell distribution supports a critical role in many leukocyte functions, including regulation of signal transduction and cell activation associated with the T cell and B cell receptors. The 104 antibody is typically used as a leukocyte marker in Ly5.2 mouse strains C57BL/6, BALB/c, C58, DBA/1, DBA/2, C3H/He, CBA, 129, A and AKR. The antibody has been demonstrated to be specific for CD45.2 and is not cross-reactive with CD45.1-bearing cells.

## 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.

violetFluor™ 500 dye is excited by the violet (405 nm) laser and has a peak emission of 500 nm. The recommended band pass filter for this dye is 525/20. violetFluor™ 500 can be used as an alternative for BD Horizon™ V500 or Pacific Orange®.

## REFERENCES

Willinger T and Flavell, RA. 2012. Proc. Natl. Acad. Sci. 109: 8670 - 8675. (Flow Cytometry)Hale JS, Nelson LT, Simmons KB, and Fink PJ. 2011. J. Immunol. 186: 799 - 806. (Flow Cytometry)Orr MT, Beilke JN, Proekt I, and Lanier LL. 2010. Proc. Natl. Acad. Sci. 107: 15844 - 15849. (Flow Cytometry)Banerjee K, Biswas PS, Kumaraguru U, Schoenberger SP, and Rouse BT. 2004. 173: 7575-7583. (Immunofluorescence microscopy – frozen tissue)Favre CJ, Mancuso M, Maas K, McLean JW, Baluk P, and McDonald DM. 2003. Am. J. Physiol. Heart Circ. Physiol. 285:H1917-H1938. (Immunocytochemistry)Shen F-W, Tung J-S, and Boyse EA. 1986. Immunogenetics. 24(3): 146-149. (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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