

## **TECHNICAL DATA SHEET**

# violetFluor™ 500 Anti-Mouse CD45 (30-F11)

Catalog Number: 85-0451

#### PRODUCT INFORMATION

Contents: violetFluor™ 500 Anti-Mouse CD45 (30-F11)

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

**Clone:** 30-F11

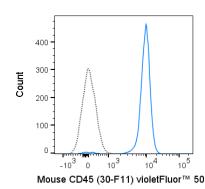
Reactivity: Mouse

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 (85 -0451) (solid line) or 0.5 ug violetFluor™ 500 Mouse IgG2b isotype control (dashed line).

Rev. 20200212

#### **DESCRIPTION**

The 30-F11 antibody reacts with mouse CD45, which is one of the most abundant hematopoietic markers and is expressed on all leukocytes (the Leukocyte Common Antigen, LCA). CD45 is a protein tyrosine phosphatase existing in several isoforms, each being generated and expressed in cell-specific patterns. With its broad cell distribution, CD45 is critical for many leukocyte functions, regulating signal transduction and cell activation associated with the T cell receptor, B cell receptor, and IL-2 receptor. Other forms of CD45, with restricted cellular expression, include CD45R (B220), CD45RA, CD45RB, CD45RO and others. The 30-F11 antibody is widely used as a leukocyte marker for B cells, T cell subsets and NK 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.

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, eFluor® 506 or Pacific Orange®.

#### **REFERENCES**

Panchal RG, Ulrich RL, Bradfute SB, Lane D, Ruthel G, Kenny TA, Iversen PL, Anderson AO, Gussio R, Raschke WC, and Bavari S. 2009. 284: 12874-12885. (Immunoprecipitation)Cherpes TL, Busch JL, Sheridan BS, Harvey SAK, and Hendricks RL. 2008. J. Immunol. 181: 969-975. (Complement-mediated cell depletion)Cheng G, Zhang H, Yang X, Tzima E, Ewalt KL, Schimmel P, and Faber JE. 2008. Am. J. Physiol. Regul. Integr. Comp. Physiol. 295: R1138-R1146. (Immunohistochemistry – paraffin embedded tissue)Nguyen JT, Evans DP, Galvan M, Pace KE, Leitenberg D, Bui TN, and Baum LG. 2001. J. Immunol. 167: 5697-5707. (Immunofluorescence microscopy, Immunoprecipitation)Czyzyk J, Leitenberg D, Taylor T, and Bottomly K. 2000. Mol. Cell. Biol. 20(23): 5740-5747. (Western Blot)Tsuboi S and Fukuda M. 1998. J. Biol. Chem. 273: 30680-30687. (Western Blot)

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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