

TECHNICAL DATA SHEET

violetFluor™ 500 Anti-Mouse MHC Class II (I-A/I-E) (M5/114.15.2)

Catalog Number: 85-5321

PRODUCT INFORMATION

Contents: violetFluor™ 500 Anti-Mouse MHC Class II (I-A/I-E)

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

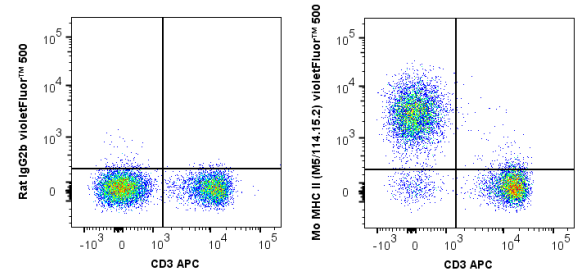
Clone: M5/114.15.2

Reactivity: Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C protected from light

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with APC Anti-Mouse CD3 (20-0031) and 0.25 ug violetFluor™ 500 Anti-Mouse MCH ClassII (85-5321) (right panel) or 0.25 ug violetFluor™ 500 Rat IgG2b isotype control (left panel).

DESCRIPTION

The M5/114.15.2 antibody reacts with mouse MHC Class II alloantigens I-Ab, I-Ad, I-Aq, I-Ed, and I-Ek, as well as being cross-reactive with mouse cells of H-2p and H-2r haplotype. MHC Class II is widely expressed by mouse immune cells bearing these alloantigens, including T and B cells, monocytes, macrophages, and dendritic cells. The antibody does not react with the following alloantigens: I-Af, I-Ak, I-As, or NOD H-2g7. The M5/114.15.2 antibody may be used for analysis of mouse cells expressing MHC Class II alloantigens as described. Please note that the M5/114.15.2 clone may also be referred to as M5/114 in the literature.

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

Staepli F, Ludigs K, Heinz LX, Segin-Estevez Q, Ferrero I, Braun M, Schroder K, Rebsamen M, Tardivel A, Mattmann C, MacDonald HR, Romero P, Reith W, Guarda G, and Tschopp J. 2012. *J. Immunol.* 188: 3820-3828. (Flow cytometry) Parra D, Rieger AM, Li J, Zhang Y-A, Randall LM, Hunter CA, Barrera DR, and Sunyer JO. 2012. *J. Leukoc. Biol.* 91:525-536. (in vitro blocking, Flow cytometry) Scarlett UK, Rutkowski MR, Rauwerdink AM, Fields J, Escovar-Fadul X, Baird J, Cubillos-Ruiz JR, Jacobs AC, Gonzalez JL, Weaver J, Fiering S, and Conejo-Garcia JR. 2012. *J. Exp. Med.* 209: 495-506. (Immunofluorescence microscopy – frozen tissue) Chen M, Felix K, and Wang J. 2011. *J. Immunol.* 187: 5684-5692. (in vitro blocking) Busman-Sahay K, Sargent E, Harton JA, and Drake JR. 2011. *J. Immunol.* 186:6710-6717. (Immunoprecipitation) Ohmura-Hoshino M, Matsuki Y, Aoki M, Goto E, Mito M, Uematsu M, Hakiuchi T, Hotta H, and Ishido S. 2006. *J. Immunol.* 177:341-354. (Immunofluorescence microscopy – frozen tissue, Immunoprecipitation) Li C, Siemasko K, Clark MR, and Song W. 2002. *Int. Immunol.* 14: 1179-1191. (Western Blot, Immunoelectron microscopy)

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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