

TECHNICAL DATA SHEET

**violetFluor™ 450 Anti-Mouse MHC Class II (I-A/I-E) (M5/114.15.2)**  
Catalog Number: 75-5321

PRODUCT INFORMATION

**Contents:** violetFluor™ 450 Anti-Mouse MHC Class II (I-A/I-E) (M5/114.15.2)

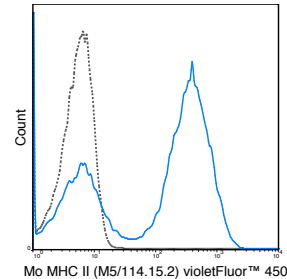
**Isotype:** Rat IgG2b, kappa

**Concentration:** 0.2 mg/mL

**Clone:** M5/114.15.2

**Reactivity:** Mouse

**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 0.25 ug violetFluor™ 450 Anti-Mouse MHC Class II (75-5321) (solid line) or 0.25 ug violet-Fluor™ 450 Rat IgG2b isotype control (dashed line).

**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-2g. 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). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

violetFluor™ 450 dye is excited by the violet (405 nm) laser and has a peak emission of 450 nm. The most common band pass filters for this dye are 440/40 or 450/50. violetFluor™ 450 can be used as an alternative for Pacific Blue®, BD Horizon™ V450 or eFluor® 450.

**REFERENCES**

Staeheil 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, Barreda 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)

NOTE: Please choose the appropriate format for each application. 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.

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