## **Product Data Sheet**

## PE/Dazzle™ 594 anti-mouse I-A/I-E

**Catalog # / Size:**  $1138240 / 100 \mu g$ 

1138235 / 25 μg

**Clone:** M5/114.15.2 **Isotype:** Rat IgG2b, κ

Immunogen: Activated C57BL/6 mouse spleen cells

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

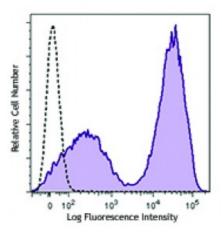
chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57 mouse splenocytes were stained with I-A/I-E (clone M5/114.15.2) PE/Dazzle™ 594 (filled histogram) or rat IgG2b, κ isotype control PE/Dazzle™ 594 (open histogram).

## **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 0.125$  microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes:

The M5/114.15.2 antibody reacts with a polymorphic determinant shared by the I-Ab, I-Ad, I-Aq, I-Ed, and I-Ek MHC class II alloantigens from mice carrying H-  $2^{p,r,q,b,d,u}$  haplotypes. Clone M5/114.15.2 however does not react wtih I-Af, I-Ak, or I-As MHC class II alloantigens.1

Additional reported applications (for the relevant formats) include: immunoprecipitation1, immunohistochemistry of frozen sections<sup>2,3,6</sup>, and *in vitro* and *in vivo* blocking of antigen presentation or ligand binding<sup>4-7</sup>. The LEAF<sup>TM</sup> purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 107610).

Application References:

- 1. Bhattacharya A, et al. 1981. J. Immunol. 127:2488. (IP)
- 2. Viville S, et al. 1993. Cell 72:635. (IHC)
- 3. Nelson AJ, *et al.* 1993. *J. Immunol.* 151:2453. (IHC) 4. Shi Y, *et al.* 1998. *J. Exp. Med.* 187:367. (Block)
- 5. Yamashita I, et al. 1993. Int. Immunol. 5:1139.
- 6. Guo M, et al. 1995. Zygote 3:65. (IHC)
- 7. Kim A, et al. 2004. Exp. Mol. Med. 36:428. (Block) 8. Luckashenak NA, et al. 2006. J. Immunol. 177:5177.
- 9. Venanzi ES, et al. 2007. J. Immunol. 179:5693.
- 10. Christensen SR, et al. 2006. Immunity 25:417. PubMed

- 11. Matte-Martone C, et al. 2008. Blood 111:3884. PubMed
- 12. De Pascalis R, et al. 2008. Infect. Immun. 76:4311. PubMed
- 13. Kuns RD, et al. 2009. Blood 113:5999. PubMed
- 14. Sabatino JJ, et al. 2011. J. Exp. Med. 208:81. PubMed
- 15. Draber P, et al. 2011. Mol Cell Biol. 22:4550. PubMed
- 16. Fu H, et al. 2014. Nat Commun. 5:3436. PubMed

**Description:** These class II molecules are expressed on antigen presenting cells (including B

cells) and a subset of T cells from H-2<sup>b,d,q,r</sup> bearing mice and are involved in

antigen presentation to T cells expressing CD3/TCR and CD4 proteins.

Antigen 1. Watts C. 1997. Ann. Rev. Immunol. 15:821.

References: 2. Pamer E, et al. 1998. Ann. Rev. Immunol. 16:323.