

**Pacific Blue™ anti-mouse I-A/I-E**

**Catalog # / Size:** 1138095 / 25 µg  
1138100 / 100 µg

**Clone:** M5/114.15.2

**Isotype:** Rat IgG2b, κ

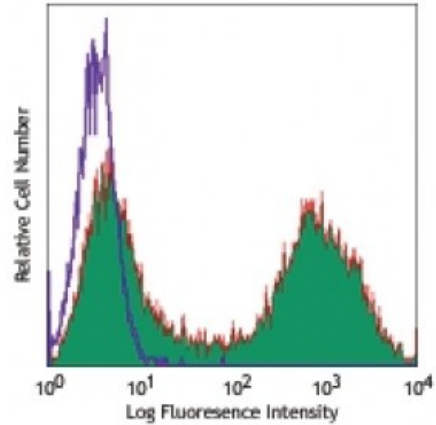
**Immunogen:** Activated C57BL/6 mouse spleen cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™ .

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 mouse splenocytes were stained with anti-mouse I-A/I-E (clone M5/114.15.2) Pacific Blue™ (filled histogram) or rat IgG2b, κ Pacific Blue™ isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤ 0.25 microg per 10<sup>6</sup> cells in 100 microL volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** The M5/114.15.2 antibody reacts with a polymorphic determinant shared by the I-Ab, I-Ad, I-A<sup>q</sup>, I-Ed, and I-Ek MHC class II alloantigens from mice carrying H-2<sup>p,r,q,b,d,u</sup> haplotypes. Clone M5/114.15.2 however does not react with I-A<sup>f</sup>, I-Ak, or I-A<sup>s</sup> MHC class II alloantigens.1

Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1</sup>, 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™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm 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**  
**References:**

1. Watts C. 1997. *Ann. Rev. Immunol.* 15:821.
2. Pamer E, *et al.* 1998. *Ann. Rev. Immunol.* 16:323.