

Alexa Fluor® 647 anti-mouse CD45.2

Catalog # / Size: 1149090 / 100 µg
1149085 / 25 µg

Clone: 104

Isotype: Mouse IgG2a, κ

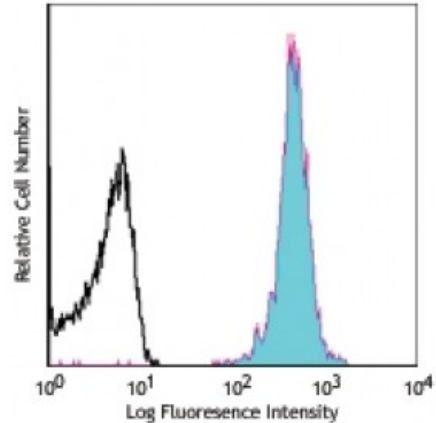
Immunogen: B10.S mouse thymocytes and splenocytes

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

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

Concentration: 0.5



C57BL/6 mouse splenocytes stained with 104 Alexa Fluor® 647

Applications:

Applications: Immunofluorescence

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 ≤0.06 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

Application Notes: The 104 antibody does not react with mouse cells expressing the CD45.1 alloantigen. Additional reported applications (for the relevant formats) include: immunoprecipitation⁴, *in vivo* and *in vitro* blocking of B cell responses^{1,2}, and immunohistochemical staining of acetone-fixed frozen sections³.

- Application References:**
1. Yakura H, *et al.* 1983. *J. Exp. Med.* 157:1077. (Block)
 2. Yakura H, *et al.* 1986. *J. Immunol.* 136:2729. (Block)
 3. Suzuki K, *et al.* 2000. *Immunity* 13:691. (IHC)
 4. Shen FW, *et al.* 1986. *Immunogenetics* 24:146. (IP)
 5. Baldwin TA and Hogquist KA. 2007. *J. Immunol.* 179:837.
 6. Pascal V, *et al.* 2007. *J. Immunol.* 179:1751.
 7. Burman AC, *et al.* 2007. *Blood* 110:1064.
 8. Kincaid EZ, *et al.* 2007. *J. Immunol.* 179:3187.
 9. Phan TG, *et al.* 2007. *Nature Immunol.* 8:992.
 10. Nakano-Yokomizo T, *et al.* 2011. *J. Exp Med.* 208:1661. [PubMed](#)
 11. Wen T, *et al.* 2013. *PNAS.* 110:6067. [PubMed](#)
 12. Kohlmeier JE, *et al.* 2008. *Immunity.* 29:101. (FC) [PubMed](#)

Description: CD45.2 is an alloantigen of CD45, expressed by Ly5.2 bearing mouse strains (e.g., A, AKR, BALB/c, CBA/Ca, CBA/J, C3H/He, C57BL, C57BR, C57L, C58, DBA/1, DBA/2, NZB, SWR, 129). CD45, a member of the protein tyrosine phosphatase (PTP) family, is a 180-240 kD glycoprotein expressed on all hematopoietic cells except mature erythrocytes and platelets. There are multiple isoforms in the mouse that play key roles in TCR and BCR signal transduction. These isoforms are

very specific to the activation and maturation states of the cell as well as specific cell type. The primary ligands for CD45 are galectin-1, CD2, CD3, CD4, TCR, CD22, and Thy-1.

**Antigen
References:**

1. Suzuki K, *et al.* 2000. *Immunity* 13:691.