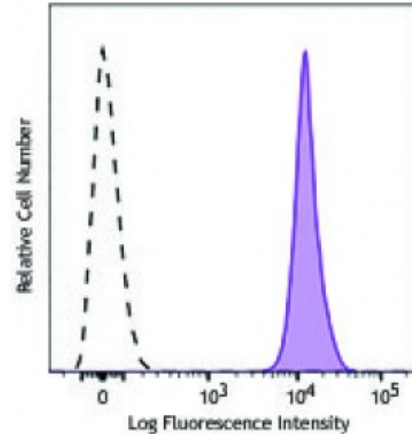


Brilliant Violet 711™ anti-mouse CD45.2

Catalog # / Size:	1149235 / 50 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 Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	Lot-specific



C57BL/6 mouse splenocytes were stained with CD45.2 (clone 104) Brilliant Violet 711™ (filled histogram) or mouse IgG2a, κ Brilliant Violet 711™ 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. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.

- 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.