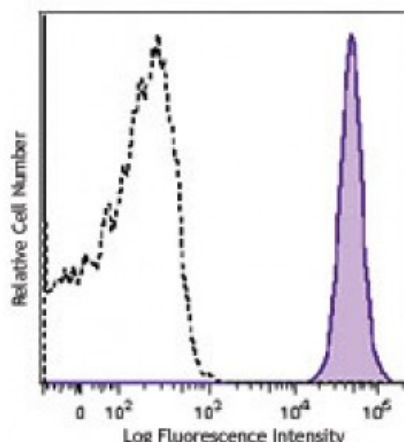


Brilliant Violet 421™ anti-mouse CD45.2

Catalog # / Size:	1149155 / 125 µl 1149160 / 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 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	microg sizes: 0.2 mg/ml microL sizes: lot-specific



C57BL/6 mouse splenocytes were stained with CD45.2 (clone 104) Brilliant Violet 421™ (filled histogram), or mouse IgG2a, κ Brilliant Violet 421™ 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 using the microg size, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. For flow cytometric staining using the microL sizes, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes:	The 104 antibody does not react with mouse cells expressing the CD45.1 alloantigen. Additional reported applications (for the relevant formats) include: immunoprecipitation ⁴ , <i>in vivo</i> and <i>in vitro</i> blocking of B cell responses ^{1,2} , and immunohistochemical staining of acetone-fixed frozen sections ³ .
---------------------------	---

Application References:	1. Yakura H, <i>et al.</i> 1983. <i>J. Exp. Med.</i> 157:1077. (Block) 2. Yakura H, <i>et al.</i> 1986. <i>J. Immunol.</i> 136:2729. (Block) 3. Suzuki K, <i>et al.</i> 2000. <i>Immunity</i> 13:691. (IHC) 4. Shen FW, <i>et al.</i> 1986. <i>Immunogenetics</i> 24:146. (IP) 5. Baldwin TA and Hogquist KA. 2007. <i>J. Immunol.</i> 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.