SONY

Product Data Sheet

PerCP anti-mouse CD45.2

Catalog # / Size: 1149130 / 100 µg
1149125 / 25 µg

Clone: 104

Isotype: Mouse IgG2a, κ

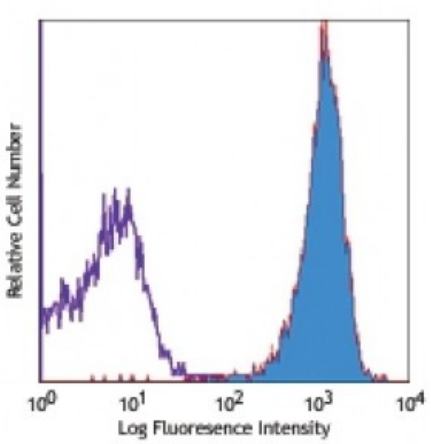
Immunogen: B10.S mouse thymocytes and splenocytes

Reactivity: Mouse

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

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

Concentration: 0.2



C57BL/6 mouse splenocytes stained with 104 PerCP

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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP has a maximum absorption of 482 nm and a maximum emission of 675 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.